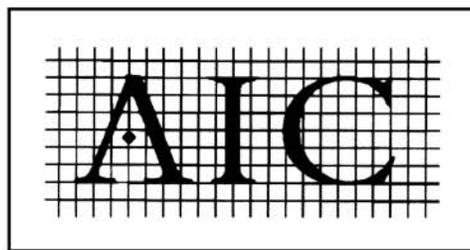


# **AIC PAINTINGS SPECIALTY GROUP POSTPRINTS**

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**Volume 16  
2003**



**The American Institute for Conservation of Historic & Artistic Works**

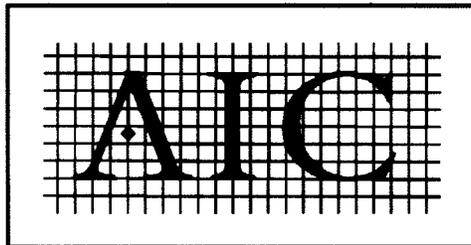
# AIC PAINTINGS SPECIALTY GROUP POSTPRINTS

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Papers Presented at the Thirty-first Annual Meeting  
of the American Institute for Conservation of Historic & Artistic Works  
Arlington, Virginia  
June 5-10, 2003

Compiled by Helen Mar Parkin

Volume 16  
2003



The American Institute for Conservation of Historic & Artistic Works

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Volume 16  
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## **TWENTY-THREE YEARS OF THE PAINTINGS SPECIALTY GROUP IN FIFTEEN MINUTES OR LESS**

Rebecca Anne Rushfield

While there are people who could write histories of the Paintings Specialty Group with all of the conflict and excitement that go into the creation and growth of an organization, I am here presenting a brief, semi-official history and have thus stuck to the recorded words of the Group's representatives.

The first efforts to form specialty groups within the AIC came at the 7<sup>th</sup> annual meeting held in Toronto over Memorial Day Weekend in 1979. The 7<sup>th</sup> annual meeting was much smaller and simpler than today's meeting. It lasted three days. Twenty papers were presented. Two workshops were held on the afternoon of the last day. In contrast, the present meeting will run six days. Only twelve papers were presented at the General Session, but there will be two and a half days of Specialty Group sessions and eight workshops.

At that meeting, Walter Angst of the Smithsonian Institution's Conservation Analytical Laboratory and thirteen other conservators interested in the treatment of joined wooden objects met together, spoke about developing standards for the certification of joined wooden objects conservators as a specialty group within the framework of the AIC, and asked the AIC to set aside time at subsequent annual meetings in which they could meet together as a group and discuss common problems. At that same meeting, fifty book and paper conservators got together and formulated a request for a special meeting time during future annual meetings.

In the months that followed, conservators in various specialties tried to gauge interest in the organization of specialty groups. In the case of paintings conservators, in the November 1979 issue of the AIC Newsletter, one could read the following call: "Are paintings conservators interested in forming a paintings specialty group which would meet, formally or informally at AIC meetings? We would like to find out whether there is enough interest to justify the allotment of space and time in San Francisco in 1980 and Cincinnati in 1981. Expressions of interest or ideas can be sent to the Conservation Department, Cincinnati Art Museum". There was enough interest from paintings conservators – and from conservators of other specialties. At the 1980 meeting in San Francisco, Friday afternoon May 23<sup>rd</sup> was given over to meetings of specialty groups.

Of the paintings conservators who met in San Francisco, the majority did not want a structured organization, so they opted for an informal half-day session at each annual meeting during which problems and treatments of paintings would be discussed. A moderator elected by the group would make the physical arrangements for the session, set an agenda for the session, and chair it. Martin Radecki of the Indianapolis Museum of Art was elected to serve as moderator for the 1981 meeting.

In preparation for that meeting which was to focus on wax-resin lining techniques, Mr. Radecki asked each conservator to send him both the wax-resin formula or formulas used in his or her laboratory and an estimate of the percentage of total linings performed over the past three years which were wax-resin linings as well as the relative number of hand to vacuum linings. Unfortunately, as with most requests for information, this request received few responses.

Right before the 1981 annual meeting, in an attempt to set a standard policy on specialty groups, the AIC Board issued the following statement: The Board has decided to set up a structure for Specialty Groups as open and flexible as possible with a minimum of restrictions. However, more restrictions may be added as the Board sees fit to promote the orderly development of the existing groups and the ones that may be formed. Specialty Groups of the AIC are formed to facilitate informal communication between AIC members in the same specialties. They are not constituted at this time to certify individuals or to make judgments on "correct" or "preferred" conservation procedures. Membership is limited to the members of AIC; it may not be limited in any other way. The membership of a Specialty Group is defined as those AIC members present at the Group's business session of each AIC annual meeting, and each member shall have an equal vote.

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66-10 149<sup>th</sup> Street, #4C, Flushing N.Y. 11367

During the business portion of the 1981 Paintings Specialty Group session, the membership voted to remain informally organized without dues. The next year, at the Milwaukee meeting, the informal nature of the Group was reaffirmed, but the collection of annual dues was approved and the amount was set at \$5.

In the fall of 1982, the AIC Board, observing the growth of the Specialty Group rolls and programs, set down further policy for their governance. In the November 1982 issue of the AIC Newsletter, a statement from the Board read: The AIC Board must approve all Specialty Group activities. Activities of the Specialty groups must reflect the intent and purposes of the AIC. Each Specialty Group can set its own level of dues and determine its own budget. However, the AIC collects the dues and disperses the funds. Any grant applications that Specialty groups wish to submit to funding agencies must be submitted by the AIC Board on behalf of the Groups.

The Paintings Specialty Group was one of the groups whose activities were expanding. In July 1983, it sponsored a refresher course on Developments in Lining Techniques, began a newsletter under the editorship of David Miller, and was the first Group to create a logo for use in the AIC Newsletter. The Lining Refresher Course was repeated in July 1984 and July 1985. The Group sponsored a second refresher course in July 1985. The topic was "Theories on the Cleaning of Paintings". In the summer of 1986, it co-sponsored with the Objects Specialty group a refresher course on the "Management of a Conservation Laboratory". Its chairmen continued to plan annual meeting programs and its members served as representatives on various AIC Committees.

By the spring of 1988, when the Paintings Specialty group voted to create the position of Vice Chairman to share the duties of the job with the Chairman and succeed him or her, membership exceeded 500. In the spring of 1989, the Group passed its first Rules of Order that listed officers, duties and voting procedures.

Although the Paintings Specialty Group was a leader in the development of refresher courses, other groups took the lead in different projects. While, in May 1984, the Book and Paper Group announced its intention to develop and publish a Paper Conservation Catalog, the Paintings Specialty Group did not begin to consider one until the fall of 1989 by which time the AIC had "charged each specialty group with the long range goal of evolving a written compilation of fundamental information upon which the profession rests". In the spring of 1990, at the Group's annual business meeting, dues were raised from \$5 to \$15 in order to cover the additional expenses involved in the development of the Paintings Catalog.

Although work began apace in 1991 with the drafting of a Table of Contents, it slowed down as the extent of the project became evident. The following announcement was published in the March 1992 issue of the AIC News: "Searching for a committed individual in a major metropolitan area who can devote a considerable amount of time and who can enlist help from fellow professionals in the same area to work on the Paintings Catalog." This was followed by a statement in the Paintings Specialty Group column of the September 1992 issue of the AIC News acknowledging that a lack of progress on the Paintings Catalog made the group realize that it lacked a clear sense of direction and announcing the formation of a Bibliographic Committee which would compile annotated bibliographies for the topics listed in the Catalog Table of Contents and put the literature in historic perspective. By the fall of 1993, the Paintings Specialty Group could state that a prototype chapter for use for grant applications was being written and that the purpose of the catalog was to aid in the decision-making process of the practicing painting conservator.

The first chapter, "Surface Coating Applications" (later called "Varnishes and Surface Coatings") was underway by the spring of 1994. The Catalog Committee optimistically believed that this chapter would be completed in one year and that eventually three of the proposed thirty-seven chapters would be produced each year. While two new chapters—"Stretchers/ Strainers/(Re)Mounting" and "Relaxing Distorted Paint" were begun by the Spring of 1995, the "Varnishes and Surface Coatings" chapter did not reach the Paintings Specialty Group members until the Spring of 1998 after Jessica Brown, a professional editor, had been hired to work on it and a \$25,000 grant from the Samuel H. Kress Foundation had been obtained for the production of the Catalog.

Over the years, work slowly progressed on several other chapters. Although a first draft of an outline for the chapter on In-painting was presented to the Paintings Specialty Group in the summer of 1997, the chapter was

still in progress in July 2000, and, in March 2001, the Paintings Specialty Group column of the AIC News noted that information for that chapter was being collected in interviews with the most experienced and respected conservators. The most recently announced change in the plan for the Catalog came in November 2002. The Catalog will now have illustrations by Mark Bockrath.

The Paintings Catalog was not the only activity to occupy the Group over the past decade. The Paintings Specialty Group continued to publish Postprints of its annual sessions, the first of which was produced in 1988. It continued to sponsor professional development workshops including Richard Wolbers' "New Methods in the Cleaning of Paintings" in August 1993 and "Tear Repair" led by Winfried Heiber of the Hochschule fur Bildende Kunst (Dresden) in September 2000. With the Research and Technical Studies Specialty Group, it organized a session on "Surface Examination and Noninvasive Analysis of Painted and Varnished Objects" for the May 1996 annual meeting in Norfolk, VA. It contributed lead articles to the AIC News—"Conservators and Appraisers: The Importance of Dialogue" in the March 1999 issue and Will Shank's "Contemporary Murals: Outside the Box" in the November 2001 issue. And, last year, it began to develop a website.

Over the past decade, as membership and activities increased, the responsibilities of the officers increased. In September 2002, the Group announced that it was hoping to create a new position so that the duties of the present officers could be redistributed. Just a few months ago, in the March 2003 issue of the AIC News, the proposed change was set down: The position of annual meeting Program Chair would be created, the Vice Chair Position would be changed to that of Publications Chair and the person filling it would be responsible for the preparation of the Paintings Specialty Group Postprints, and a three-member staggered term Nominations Committee would be formed, but the Chair and Secretary/Treasurer positions would remain the same. All offices with the exception of Program Chair would be two-year positions.

We've now reached the present day in this history of the Paintings Specialty Group, having touched but briefly upon many events and projects that merit greater discussion. We can only speculate on what the Group's concerns will be twenty-three years from now.

## FROM MIMETIC TO DIFFERENTIATED: TRADITIONS AND CURRENT PRACTICES IN ITALIAN INPAINTING

Nina Olsson

An essential ethical issue facing restorers and conservators has long been how to achieve the delicate balance between respecting the aesthetic and the historic aspects of a work of art. These two perspectives are central in the study and experimentation of inpainting methods in Italy during the 20th century. Few schools of conservation have produced such a rich dialectic and have been so prolific in the application of those concepts. Mimetic and differentiated inpainting techniques have represented opposing philosophies in the dispute of how an art work should be viewed and interpreted for much of the 20th century, yet recent restorations in Italy demonstrate less rigidity in what is considered ethical, embracing a wider spectrum of solutions. Invisible and evidenced methods have contaminated and enriched each other and current practices have brought the application of these two divergent techniques ever closer. Discussion of inpainting techniques continues to spur their modification in an ongoing exchange between restorers, specialists in conservation and art historians so that restoration may better express new currents in art history and emerging ideas on the presentation of works.

Study of modern restoration practices in Italy is merited by its importance as a primary destination for intellectuals, artists and curious travelers in the 19th and 20th centuries. This fact must be underscored, since it produced a unique environment in which painted artworks and monuments were of principal interest and their rediscovery and conservation took on enormous significance. What ensued was the publication of not only guidebooks, but also restoration manuals, and of course studies in art history.<sup>1</sup>

Already in the 19th century two conflicting attitudes towards loss compensation had emerged, antecedents to what we refer to today as mimetic and differentiated inpainting. Debate over their relative validity coincided with the birth of a modern approach to the study of art history and the transformation of the role of conservator in Italy from that of the painter-restorer to a modern technician and critic. The first of these tendencies, known as 'amateur' restoration, was guided by a Pre-Raphaelite spirit in both its conception and execution and tended towards complete figurative reconstruction. Gaetano Bianchi's treatment of the Bardi Chapel in the church of Santa Croce in Florence of 1852 is perhaps the most emblematic restoration of this type. Bianchi's work, which was later removed by Leonetto Tintori in 1958, is known through photo documentation of the murals taken in 1936 and from detached fragments visible today in the antechamber to the sacristy of the Florentine church.<sup>2</sup>

The pictorial reconstructions of large areas of loss were done in 'buon fresco'. These reconstructions were painted on top of preparatory sketches in sinopia, according to the methodology adopted by the old masters. Bianchi drew the sinopia sketch not because it would be visible in the end, but to indicate a passage in his mental and technical process, or to reproduce a grand pictorial tradition of the past and to immerse himself in the art of Giotto: his intervention was almost a personal homage to the old master. In addition to the 'ex novo' reconstructions, Bianchi also invented decorative embellishments, cast shadows and finished the murals with a brown tempera wash applied in the manner of an aged patina. Bianchi's work was removed since the interpretation of the lacunae resulted in reconstructions that altered not only the meaning of the scenes, but also the chromatic qualities of the murals.<sup>3</sup>

Among those that lauded Bianchi's work was the English aesthete John Ruskin that captured the romantic notion of recovering a lost past through the study of art in his writings.<sup>4</sup> It is interesting that Ruskin, usually opposed to radical restorations, considered Bianchi's work a masterpiece. Observing the great masterpieces allowed Ruskin to penetrate the spirit of the representation and to meditate on their symbolic

value. It was therefore in his opinion the obligation of the restorer to reproduce faithfully the contours since for the non connoisseur a restored work may be more intelligible than an original work which is quite ruined.<sup>5</sup> Perhaps Bianchi's work in the Cappella Bardi obtained favor with the English critic for the innovative balance between 'ex novo' reconstructions of the missing forms and the brown "patina" that gave these frescos, newly rediscovered and cleaned, the aspect of a monument naturally aged that had always been present.<sup>6</sup>

In opposition to this romantic approach towards restoration was 'connoisseur' attitude that favored minimal restoration. The leading advocate of this new tendency was Giambattista Cavalcaselle who reacted strongly against the established practice of completing missing areas, favoring a more fragmentary work of art that, however, in his opinion, appeared more genuine. He writes in 1875:

*"for the intelligent person or the academic, a picture that has deteriorated or is missing in parts is better than a picture that has been finished or refreshed by the restorer and which ends up as neither an old work nor a modern one."*<sup>7</sup>

For Cavalcaselle it was the authenticity of the original pictorial text that allowed an unobstructed study of the character of the artist, and a more precise attribution to an artist. In this sketch of the same Bardi Chapel, he carefully delineates the original passages of the fresco from those by Bianchi that he identifies as new. Through his extremely innovative approach, the modern science of art history came forth. His work left an indelible mark on the generation of art historians of the early 20th century as well as restoration practices. In the new philological study of attribution that we may find the philosophical and ethical bases for differentiated inpainting. Cavalcaselle did advocate reintegrating filled areas of loss, but also warns:

*"one may paint on the fill that which is missing, trying to imitate the character of the antique painting, but one must be careful to never pass beyond the confines determined by the contour of the new plaster onto the antique. It is certainly useful that the color restoration of the added part manages to harmonize well with the antique, but much more important is to conserve the painting in its originality."*<sup>8</sup>



(a)



(b)

Fig. 1 Panel of the predella. Duccio, *Maestà*, Museo dell'Opera, Siena. Detail of inpainting by chromatic selection (a) in progress with textured fill and (b) finished. Photos published with permission of the Ministero dei Beni e dei Attività Culturali of Italy. Further reproduction is prohibited.

Cavalcaselle also recommended replacing originals with copies, so that the original would be saved for the *connoisseur* and the copy would satisfy the curious visitor and would help him to understand the original.

In the ensuing first decades of the 20th century, Italian studies in art history and restoration were undergoing major evolutionary change, both technically and in the supporting theories. Above all, a new historical perspective on art history, and the obligation towards conservation is clear. Yet another art critic that greatly influenced early 20th century restoration was Roberto Longhi. His views are also tied to the case of the Bardi Chapel in Santa Croce. In 1936 he writes a report on the restorations in Santa Croce for the Minister of Education (at that time the responsible government body for Culture and the Arts). He expressed a spirited criticism of both the restorations done in the past, and the lack of decisive action taken in the recent work done on the Chapel. He writes:

*“Of the frescoes that were by Giotto, the intervention was limited to a few tests of removing surface dirt on the paintings, without attempting removal of the ‘800 restoration, that is well known to have altered both the character and the meaning of the cycle. Here the grave problem remains: shall we leave things as they are, [having grown attached to the century old aspect of the chapel] [...], or shall we confront with full responsibility a restoration which would lead to the disappearance of many overpainted passages of the composition....”*<sup>9</sup>

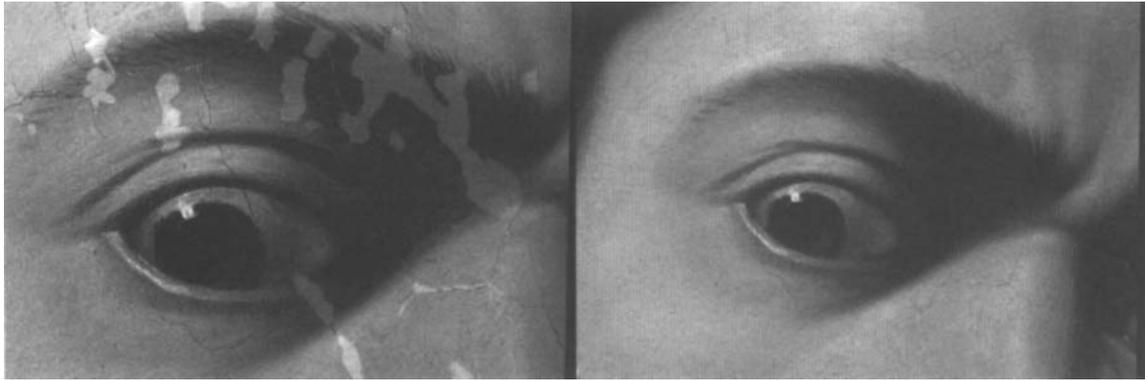
This was also a period immense discovery of artworks and in 1902 the first legislation was passed to protect the artistic patrimony of Italy from being dispersed through the antiquarian market to foreign buyers.<sup>10</sup> A government office responsible for cataloguing and conservation was also created. The first state run laboratories were instituted in 1934 in Florence under the direction of Ugo Procacci<sup>11</sup>, and in 1939 in Rome under the direction of Cesare Brandi. Each assembled a group of restorers, most of which had been trained as painters, and began forming a new type of modern conservation, based on Roberto Longhi’s vision of restoration as a critical field instead of an artistic one.<sup>12</sup>

Brandi’s appointment and early work as founding director of the ICR, Central Institute of Restoration, was during and after World War II, and this context infused his work with a particular sensitivity to the importance of historical memory as applied to art restoration. His contribution to Italian Conservation is known through his influential essays and lectures on restoration theory which synthesized recent currents of art history and perception theory.<sup>13</sup>

Brandi affirms that a work of art lives and is recreated in our mind as we observe it and this is translated throughout his written work in a clear predilection for the perception of the image.<sup>14</sup> He examined specifically the topic of inpainting in the sections entitled *The Potential Unity of the Work of Art*<sup>15</sup>, and *Notes on the Treatment of Lacunae*.<sup>16</sup> In these works Brandi brilliantly executes a synthesis of studies ranging from philosophical discussion of existential realities to Pietro Edwards’ early description of guidelines for restoration of 1771, but above all K. Koffka’s *Gestalt Psychology*, to establish the theoretical groundwork for a modern attitude towards loss compensation.

In this writings, Brandi emphatically refutes the notion of reconstructing the areas of loss “by analogy”<sup>17</sup> which he considers a falsification of history and an aesthetic offense. In his view, the work of art comes to us as a “closed circuit”.<sup>18</sup> Brandi states that by integrating areas of loss with figurative reconstruction the restorer pretends to substitute or approximate the artist, violating that creative closed circuit that produced the work of art. Brandi, therefore, insists that any integration must be visible to the naked eye, without the aid of special instruments. Brandi is often credited with resolving the so-called “crisis” in the early years of modern art restoration by instituting the use of the neutral tone as an alternative to reconstructive inpainting. This practice was, of course, already in use in the field of archaeology, and provided a simple yet differentiated treatment of losses. The surface of the fill was smooth and the color

was add mixed. Already by the time of his writing, Brandi had grown critical of the neutral tone that he saw as an invasive figurative element that tended to advance while the painting itself receded, an effect he characterized as one of a “spot appearing on a [pane of glass]”<sup>19</sup>, a direct reference to Gestalt theories on the figure to ground relationship. Brandi also notes the effect of simultaneous contrast between the color of the neutral tone and the chroma of the original painting, an effect that he perceives as dulling the original while reinforcing the individuality of the lacuna.<sup>20</sup>



(a)

(b)

Fig.2. Caravaggio, *Medusa*, Uffizi, Florence. Detail of inpainting by chromatic selection in progress (a) and completed (b). Photos published with permission of the Ministero dei Beni e dei Attività Culturali of Italy. Further reproduction is prohibited.

Many experiments followed in an attempt to ameliorate the unsatisfactory effects of the neutral tone. In an effort to force the neutral tone to visually recede, the surface of the fill was left below that of the original. Yet another proposal involved leaving the canvas or wood support visible in areas of loss, which would also resolve the problem of ambiguity between the original painting and material added in restoration.<sup>21</sup> The most lasting and successful differentiated method of loss compensation developed under Brandi's direction was a system of fine brushstrokes called ‘tratteggio’, which formally and chromatically reconstruct areas of loss.<sup>22</sup> The brushstrokes are fine, vertically oriented and should not be perceived at the correct distance for the reading of the piece. Upon close inspection, the viewer may easily differentiate the restored areas from the original text. In early examples the surface of the fill was level with the original, yet perfectly smooth.

In 1978, Umberto Baldini published similar methods in his “Theory of Restoration and the Unity of Methodology” as developed in Florence at the Laboratories of the Opificio delle Pietre Dure.<sup>23</sup> Baldini opens his book by defining three distinct acts in the lifetime of a work of art: the first is the realization of the work by the artist, the second is the effect of time on the work of art and the third is the effect of man on the work. Baldini states that the work of the conservator (the third act) must remain distinct from the original creative process (the first act), without denying the effects of time (the second act). These methods of differentiated loss compensation were later published with the names ‘chromatic selection’ and ‘chromatic abstraction’.<sup>24</sup> Chromatic selection is similar to the Roman ‘tratteggio’, in that it is composed of fine brushstrokes which reconstruct formally and chromatically the missing form, yet differs above all in the orientation of the brush strokes which follow the *ductus* or the direction suggested by the form. It has been said that the directional movement of the brushstrokes was originally suggested by egg tempera or fresco painting technique. The use of ‘chromatic selection’ was originally limited to small areas of loss where the logical continuity of the form was clear and was executed with brush strokes of pure color in watercolor departing from a light ground. Chromatic abstraction was intended instead for vast losses where significant forms were lost, and therefore where a formal reconstruction would be impossible. Chromatic

abstraction was intended as an improvement of the neutral tone and is a modulated field of color made vibrant by the use of small brushstrokes of intense color. The most famous application of chromatic abstraction was in the restoration of Cimabue's Crucifix of Santa Croce, which had been severely damaged in the flood that ravaged Florence in 1966.<sup>25</sup>

During the 1960s, 70s and into the 80s, differentiated inpainting became synonymous with ethical restoration practice and many of the earliest experiments have a chromatic intensity which matched the rigor of the ideal of correctness, a sort of manifesto, and were perhaps at times it too evident with respect to the painting.<sup>26</sup> The "unity of methodology" described by Baldini also meant uniformity in its application. It was conceived as an objective inpainting tool, rational, scientifically based, where the individual restorer became secondary to the ideal of the laboratory as a whole and its results.

At the same time, most of the painting conservators working in the major research labs also had their own ateliers where they privately worked for collectors and antiquarians that rarely requested differentiated inpainting.<sup>27</sup> Although not recognized in public conservation, mimetic remained the bread and butter technique of inpainting. Conservators became bilingual so to speak, fluent in both methods, executing both differentiated inpainting and mimetic reconstructions, the technique of each one informing and referencing the other. In practice, these two seemingly divergent methods have reciprocally modified each other, forming at times hybrid methods.

An example of a successful meshing of mimetic and differentiated methods may be seen in the work recently conducted on panels of the predella and incoronamento from the *Maestà* by Duccio, at the Museo dell'Opera in Siena.<sup>28</sup> The surface of the fill was textured in imitation of the irregularities and age cracks of the original, and complex forms were reconstructed, then differentiated through the use of brushstrokes (fig. 1). Although the brushstrokes are short and split, the orientation is vertical so as to be consistent with the 'tratteggio' done on the main altarpiece by the Laura Mora for the Istituto Centrale di Restauro in 1958. The textured fill lends a greater continuity to the surface when the work is varnished.

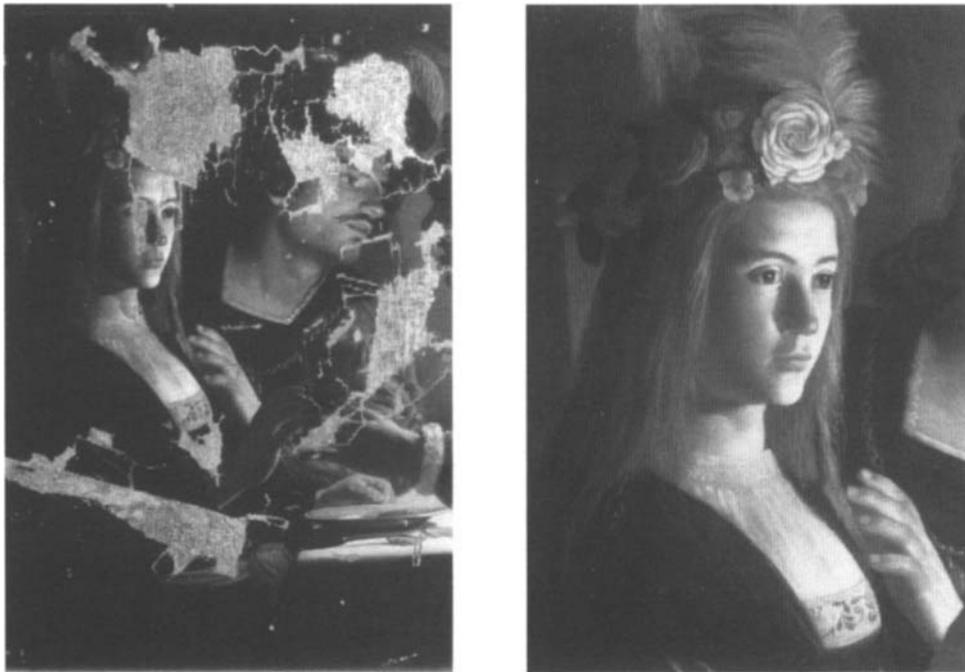
The recent restoration of the *Medusa* by Caravaggio from the Uffizi Gallery was also inpainted with a method of chromatic selection adapted especially to the piece.<sup>29</sup> Because of the close distance required to correctly view the piece, the brushstrokes used to compose the inpainting are very fine, so fine in fact that they are difficult to perceive with the naked eye. (Fig.2). The result is one that perfectly satisfied the aesthetic desire to view the piece as a finished whole, yet also allows the inpainted areas to be differentiated upon closer observation.

Another factor that influenced the use of mimetic inpainting in public restoration relates to studies in art history that during the 80's and 90's became increasingly concerned with the study of collections, museums and the recontextualization of the work of art. Differentiated inpainting for loss compensation of painted works still located in churches and used as objects of devotion began to be seen as culturally insensitive, and forced.<sup>30</sup> A new attentiveness to the architectural context for works led to the recovery of decorations in chapel settings, much like Bianchi's decoration of the Bardi Chapel, and also to the presentation of the artwork in frames appropriate for the period.<sup>31</sup>

One event in particular captures the essence of contemporary Italian restoration practices, in terms of the difficult ethical issues regarding reconstruction and in the complex technical solutions required to overcome the tragic effects of time. I refer to the car bomb which exploded ten years ago on May 27, 1993 on a small street adjacent to the Uffizi gallery in Florence. The attack was almost unprecedented in targeting a significant cultural monument. The architectural container of the gallery, 55 busts and statuary and at least 173 paintings were damaged. Moreover, the lives of an entire family were taken. As testimony to the

grave and tragic historical importance of this attack, art historians and restorers chose differentiated inpainting techniques in most cases.<sup>32</sup>

The percussive impact of the bomb and fragments of broken glass damaged many of the pieces in the Vasari Corridor, and was particularly devastating to the Gallery's holdings of 17th century works by the Caravaggesque painters Gherardo delle Notti and Bartolomeo Manfredi. *The Adoration of the Shepards*, a large altarpiece by Gherardo, was considered in the immediate aftermath of the explosion a complete loss. In May of 2003, in occasion of the 10th anniversary of the explosion, the piece returned to the Uffizi, after an intervention that aimed to preserve what remained of the poetry of the piece. What survives is but a ruin of the original painting. In this case the canvas was tinted so as to enhance those extant fragments that remain.<sup>33</sup>



(a) (b)  
Fig.3. Gherardo delle Notti, *Supper of the Betrothed*, Uffizi, Florence, before inpainting (a) and after inpainting with chromatic selection. Photos published with permission of the Ministero dei Beni e dei Attività Culturali of Italy. Further reproduction is prohibited.

The *Concert* by Bartolomeo Manfredi was among the most distressed works. The problematic restoration was resolved through an archaeological assemblage of the surviving pieces done thanks to photodocumentation of the piece. The areas of loss were filled with canvas inlay that was also toned to better weld the surviving fragments, much as Brandi advocated fifty years before, and small losses in the extant islands of color were reintegrated with a neutral tone.<sup>34</sup>

In view of the grave damage to the opus of Gherardo in the Uffizi collection, an attempt was made to recompose the image of the *Supper of the Betrothed*. The losses were fully reconstructed with the aid of photodocumentation, with great virtuosity through an elaborate application of chromatic selection. The dark palette and thick and opaque quality of the baroque material was difficult if not impossible to match with transparent watercolor, and therefore a tempera base of the same color as the original ground was applied and the chromatic selection was done in part in gouache.<sup>35</sup> The use of substrate base layers and

gouache for chromatic selection represents yet another practical evolution of differentiated loss compensation especially suited for oil paintings with dark grounds.

The *Card Players*, by Bartolomeo Manfredi is a work forever lost. Both the *Card Players* and the *Concert* are remembered in the Vasari Corridor by coeval copies that were restored with invisible inpainting.<sup>36</sup>

From the early polemics regarding pictorial reintegration, to the more recent examples of differentiated inpainting, it is evident that restoration in Italy has embodied a positivism in its methodology through out the last century. Current practices in inpainting remain a clear expression of the commitment of Italian conservation to respect the strongly historicizing character of its culture and the philosophical guidelines of its tradition without compromising the aesthetic experience of observing a masterpiece in person. The plurality of choices before historians and restorers today also bespeaks an attitude that allows for varied conditions, historical stratifications and diverse locations and purposes for the viewing of paintings. This dynamic approach allows restoration to adapt to new problems and ideas regarding painted works.

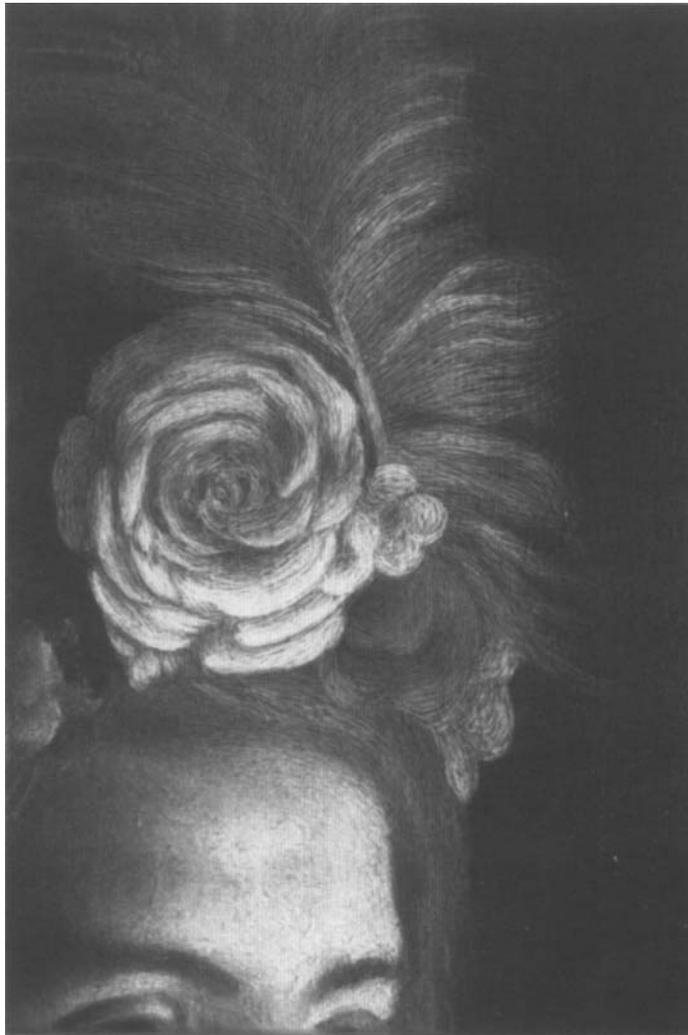


Fig.4 Gherardo delle Notti, *Supper of the Betrothed*, Uffizi, Florence. Detail of completed reconstruction of losses with chromatic selection. Photos published with permission of the Ministero dei Beni e dei Attività Culturali of Italy. Further reproduction is prohibited.

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<sup>1</sup> For information on foreigners and their role in restoration in 19th c. Florence see Giannini, C. 1989. Accenni sulle influenze straniere in alcuni episodi di restauro fiorentino. In *L'idea di Firenze*, ed. M. Bossi et al. Florence: Centro Di. 139-141.

<sup>2</sup> For a description of the condition of the Bardi Chapel in 1936, see Procacci, U. 1937. Relazione dei lavori eseguiti agli affreschi di Giotto nelle Cappelle Bardi e Peruzzi in Santa Croce. *Rivista d'Arte*, XIX: 377-389.

<sup>3</sup> For information on G. Bianchi's work see Olsson, N. 1997. Gaetano Bianchi, Restauratore e decoratore 'Giottesco'. *Antichità Viva* 1:44-55.

<sup>4</sup> For Ruskin's views on monuments in Italy see Ruskin, J. 1875, *Mornings in Florence: Being Simple Studies of Christian Art, For English Travellers*. Sunnyside:Orpington.

<sup>5</sup> Levi, D. 1989, Mercanti, conoscitori, 'amateurs' nella Firenze di metà Ottocento: Spence, Cavalcaselle e Ruskin. In *L'idea di Firenze*, ed. M. Bossi et al. Florence: Centro Di. 108.

<sup>6</sup> Olsson, N. 1997. op. cit. 52.

<sup>7</sup> Paolucci, A. 1986. *The Restoration Laboratory in Florence*. Turin: Istituto Bancario di San Paolo di Torino. 16.

<sup>8</sup> G. B. Cavalcaselle. 1863. Sulla conservazione dei monumenti ed oggetti di belle arti. *Rivista di Comuni Italiani*. 37.

<sup>9</sup> Relazione di Roberto Longhi al Ministro dell'Educazione Nazionale, Giuseppe Bottai (Bologna, 6 novembre, 1937). In *La Bottega dei Benini*. 1998. op. cit. 176.

<sup>10</sup> Condemi, S and Torrigiani, L. eds. 1997. *La Salvaguardia dei Beni Culturali. Lineamenti di storia della tutela*. Florence: Istituto per l'Arte e il Restauro Palazzo Spinelli. 31.

<sup>11</sup> Paolucci, A. 1986. op. cit. 33.

<sup>12</sup> Condemi, S and Torrigiani, L. eds. 1997. op. cit. 35.

<sup>13</sup> Brandi, C. 1963. *Teoria del restauro*. Turin: Einaudi.

<sup>14</sup> Brandi, C. 1963. op. cit. 4. Brandi cites John Dewey's *Art as Experience* of 1934 as the basis for the concept of recognition of the work of art.

<sup>15</sup> Brandi, C. 1963. op. cit. 13-20.

<sup>16</sup> Brandi, C. 1963. op. cit. 71-76.

<sup>17</sup> Brandi, C. 1963. op. cit. 72.

<sup>18</sup> Brandi, C. 1963. op. cit. 17.

<sup>19</sup> Brandi, C. 1963. op. cit. 19.

<sup>20</sup> Brandi, C. 1963. op. cit. 75.

<sup>21</sup> For illustrated examples of these experiments see Paolini, M.G. et al eds. 1972, *VIII Mostra di opere d'arte restaurate*. Palermo: Primavera.

<sup>22</sup> Brandi, C. 1963. op. cit. 74. For an early example of 'tratteggio' applied to mural painting see Muraro, M., ed. 1949. *Mostra del restauro di monumenti e opere d'arte danneggiate dalla guerra nelle tre Venezie*. Venice: Soprintendenza ai Monumenti. Cover photo.

<sup>23</sup> Baldini, U. 1978. *Teoria del restauro e unità di metodologia*. Florence: Nardini.

<sup>24</sup> Casazza, O. 1981. *Il restauro pittorico nell'unità di metodologia*. Florence: Nardini.

<sup>25</sup> Baldini, U. 1978. op. cit. 56.

<sup>26</sup> An early (first?) example of chromatic selection is the *Tondo* by Bartolomeo di Giovanni, *Tondo* by Bartolomeo di Giovanni, today relegated to a storeroom at Museo Horne, Florence.

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<sup>27</sup> Seroni, M. 2003. Personal communication. Massimo Seroni was painting conservator at the OPD from 1961-1986.

<sup>28</sup> I was able to observe Daniele Rossi and Laura Amorosi work on the predella and incoronamento at the laboratories of the Pinacoteca Nazionale di Siena.

<sup>29</sup> Scarpelli, S. 2002. La Medusa - Tecnica, stato di conservazione e restauro. In *La Medusa del Caravaggio restaurata*, ed. C. Caneva et al. Rome: Retablo. 121-131.

<sup>30</sup> Bagnoli, A. 2003. Personal Communication. Sovrintendenze delle Belle Arti e Culturali of Siena.

<sup>31</sup> Paolucci, A. 1986. op. cit. 210-211.

<sup>32</sup> See Petrioli Tofani, A. ed. 1995. Gli Uffizi studi e ricerche. I restauri dell'attentato. Consuntivo 1993-1995. Florence: Centro Di.

<sup>33</sup> Dori, L. and Dori, A. 2003. *La luce dal buio. Note sul Restauro dell'Adorazione dei Pastori di Gherardo delle Notti*. Andrea and Lucia Dori kindly permitted me to see the work in progress and use their report on the condition and treatment of the altarpiece. Publication is forthcoming.

<sup>34</sup> Petrioli Tofani, A. ed. 1995. op. cit. 60-64.

<sup>35</sup> Petrioli Tofani, A. ed. 1995. op. cit. 50-55.

<sup>36</sup> Petrioli Tofani, A. ed. 1995. op. cit. 10-11.

# RETOUCHING PAINTINGS IN EUROPE FROM THE 15<sup>TH</sup> THROUGH THE 19<sup>TH</sup> CENTURIES: DEBATES, CONTROVERSIES, AND METHODS

Wendy Partridge, Associate Paintings Conservator

## Introduction

Loss compensation in paintings has generated discussion in Europe for centuries. This paper will attempt to provide an overview of debates surrounding loss compensation and show where possible the materials and techniques used, or at least recommended, for retouching. In my research I have been helped by some extremely useful literature, especially Alessandro Conti's *Storia del Restauro* published in 1988 as well as more recent studies by Andrew McClellan, Jaynie Anderson, Cornelia Wagner, and Elizabeth Darrow, to name just a few scholars, on specific moments in the history of conservation.

Retouching has been criticized in art historical writing as far back as Giorgio Vasari. In his biography of Luca Signorelli, Vasari discussed a painting where the head of the Christ Child had been damaged and was repainted about fifty years later by Sodoma. Vasari was not particularly impressed with Sodoma's work, writing "At Volterra, he [Signorelli] painted a fresco over the altar of a confraternity in the church of San Francesco representing the Circumcision of Our Lord which is considered beautiful and a marvel, although the Child has suffered from the humidity and the restoration by Il Sodoma is much less beautiful than the original. In truth, it would sometimes be better to keep works done by excellent men in a semi-damaged state than to have them retouched by some one less skilled."<sup>1</sup> Vasari's implication, of course, was that genius could not be reproduced. This sentiment against retouching would be restated periodically in the art historical literature.<sup>2</sup> At the same time, there were other authors (often restorers) who in the 18<sup>th</sup> century began to evaluate the specific complexities of loss compensation.

This paper will examine the historical criteria for successful retouching. It will look at the beginnings of retouching in the style of the original artist in the Renaissance, the occasional use of reversible retouching materials in the 17<sup>th</sup> and 18<sup>th</sup> centuries, and the search for stable materials in the 18<sup>th</sup> and 19<sup>th</sup> centuries. By the end of the 18<sup>th</sup> century specific training and skills were suggested for inpainting, including the knowledge of old master techniques and chemistry. In the 19<sup>th</sup> century a "less is more" principle was articulated, an apparent response to a purist aesthetic that suggested leaving losses visible.

## Retouching in the style of the original artist

Retouching in the style of the artist seems to have begun surprisingly early. For example, in Simone Martini's *Guidoriccio da Fogliano* fresco in Siena (1320s) a large area of the castle of Montemassi was damaged and recreated in the original style either seventy-five or one hundred and fifty years after the fresco was painted.<sup>3</sup> This practice, of course, is quite unusual at this date. More commonly damaged and even undamaged paintings were renovated in a contemporary style to ensure the work's continuing vitality. A Christ Child was added about one hundred years later to a Bernardo Daddi triptych of the 1330s (J. Paul Getty Museum) representing a Madonna with saints. Art historians speculate that the piece was commissioned for a funerary chapel and that the Madonna was gesturing towards a sarcophagus, interceding for the soul of the deceased. At some point the painting was probably moved, the interceding gesture no longer made sense, and the Child was added.

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Despite “overpaint-to-update” practices, certainly by the late Renaissance there are examples of faithful reconstructions of the original composition. A famous case is Andrea del Sarto’s *Madonna of the Harpies* (1517). The painting was damaged in the Florence flood of 1557, and approximately the bottom fifth of the paint layer was destroyed. The painting was considered to be a work of genius and was reconstructed in a manner close to the pre-damaged state.

### Reversible Retouching

Although intense pre-occupation with reversible retouching seems to have begun in the 20<sup>th</sup> century, there were 18<sup>th</sup>-century documents concerning the importance of reversibility, among them the well known discussions of Carlo Maratta’s projects. Carlo Maratta (1625-1713), an important Roman painter, was responsible for a number of restoration projects in Rome including Raphael’s *Stanze* in the Vatican and *Psyche Loggia* at the Farnesina Palace. Being such major works the *Stanze* and the *Loggia* have been restored and re-restored many times, and it is difficult to perceive what of Maratta’s work is still extant. The *Psyche Loggia* project (1693-4), though, was particularly well documented by contemporary and near contemporary writers. It was a complicated intervention involving frescoing areas in the vaults left unfinished by Raphael and undertaking structural work to deal with the consequences of the Loggia having been open to the elements. Also according to Maratta’s biographers, when Maratta retouched Raphael’s frescoes, he used pastels bound in gum arabic so that his work could be easily removed if a more worthy restorer were found.<sup>4</sup> There is another story of Maratta being asked by Pope Innocent XI to add a veil to Guido Reni’s *Madonna del Cucito* fresco in the Quirinal (1609-11). The pope thought the Madonna’s neckline was too low. Maratta added the veil, but with pastel so that he would not be irrevocably changing the work of another artist.<sup>5</sup> Nothing remains of Maratta’s 17<sup>th</sup>-century reversible pastel retouching as far as I know. However, a restoration campaign of the 1980s in Anne of Austria’s apartment in the Louvre discovered a very late 18<sup>th</sup>-century pastel modification in a fresco (painted about 1655) by Giovanni Francesco Romanelli. When the frescoes were restored in 1799 during the French Revolution, the allegory of Faith was changed to an allegory of Victory with the chalice and cross hidden by a pastel fasces and laurel crown.<sup>6</sup>

About one hundred years after Maratta, the Venetian Pietro Edwards (1744-1821) became a tremendously important figure in the history of restoration. He was Director of the Paintings Academy in Venice and Director of Restoration for pictures belonging to the state. Edwards and his team were responsible for restoring over 700 paintings. He wrote a number of proposals and papers on caring for paintings, including *Restoration of the Public Pictures Approved by a Decree of the Senate on September 3, 1778: Articles for the Restoration of these Pictures Proposed by Professor Pietro Edwards* and *Preliminary Dissertation on the Care and Custodianship for Instituting the Possible Preservation and the Best Maintenance of the Public Pictures* (1786). Edwards’ recommendations sound incredibly contemporary and included requests for condition reports. He was concerned about environmental effects on paintings, training for restorers, supervision and accountability, and removing old restoration that compromised paintings.<sup>7</sup> Pietro Edwards felt that retouching should be reversible. In his rules outlining restorers’ responsibilities, he wrote, “They may not use on pictures materials which cannot be removed. Instead, everything they use shall be removable from the art whenever it is necessary.”<sup>8</sup> For this reason, he directed that the Venetian paintings be retouched with dry pigments ground in a resin, probably mastic, and he seems to have prohibited insoluble retouching in oil.<sup>9</sup> In his *Proposal for a School for the Restoration of Paintings* (written after 1819) Edwards even suggested that students be required to copy “headdresses, wings, feathers, and foliage” of various painters using varnish colors.<sup>10</sup>

### The search for stable materials

While both Maratta and Edwards were influential figures and their concerns were known and discussed, reversibility was not the major concern in the 18<sup>th</sup> and 19<sup>th</sup> centuries. Instead, the real preoccupation in historical inpainting discussions was stability. Worries about inpainting darkening or lightening go back at least as far as Filippo Baldinucci’s 1681 *Vocabulario*, a dictionary of art terms. Under the heading

“restaurare” or “to restore,” he wrote, “many people think that the best pictures should not be retouched even by some one who is skilled since it becomes possible to recognize over time a restoration however small...”<sup>11</sup>

The actual search for stable materials seems to have begun in the mid 18<sup>th</sup> century. Antoine-Joseph Pernety in his art dictionary of 1757 recommended either tempera or wax retouching as highly stable. Under the heading “repeindre” or “to repaint” he wrote,

“Many people repaint damaged sections of pictures with the intention of repairing them, but it is very difficult to ensure that the new colors do not create stains...Oil will darken and create marks. One could repaint with tempera to avoid this problem...You can also read in the works of Messrs. de Caylus and Majault on painting in encaustic and wax, page 131, that colors prepared in wax work much better than oil colors to restore old paintings. M. le Lorain, a painter of the Academy, has tried this with singular success. He has repaired old paintings so that it is almost impossible to find the repaired and repainted areas.”<sup>12</sup>

My favorite example in the quest for stability comes from France during the Revolution. As with Pietro Edward’s Venetian period, this nearly contemporary moment in France is fascinating for the history of restoration. The state was finding itself responsible for a huge number of art works as a result of the confiscation of aristocratic and Church property and Napoleon’s looting. The Parisian art and museum communities had to justify to a very skeptical Europe their ability to care for all this confiscated material. To respond, numerous museum commissions were appointed, including commissions on restoration. Among the appointees were a number of important restorers, chemists, and painters, including the painter David.<sup>13</sup> One of the committee members was Jean-Baptiste Pierre Le Brun (1748-1813) who was an art dealer, painter, critic, and husband of the painter Vigée-Lebrun. In 1794 demonstrating a true Enlightenment faith in chemistry, Le Brun invited French chemists to invent a new medium for retouching that would not discolor. Le Brun was on the committee charged with designing an examination for restorers. He thought that retouching should be judged six months after it had been executed to see if the colors had shifted, and added, “This leads me to invite chemists, in order to pursue perfection in Art, to discover a way to ally dry pigments with a liquid that would replace oil, without oil’s disadvantages which include rising to the surface and distorting colors by absorbing their brilliance.”<sup>14</sup>

The search for stability led, in fact, to an increasing concern over retouching in oils. The early 19<sup>th</sup> century art press praised Pietro Palmaroli (1778-1828), an Italian restorer working in Dresden, for using watercolor on Raphael’s *Sistine Madonna*. His campaign was compared to an 18<sup>th</sup>-century effort where the retouching in oil had significantly darkened.<sup>15</sup> We also find oil retouching cautioned against in restoration literature, a new genre that first appeared in the 19<sup>th</sup> century. The first books exclusively devoted to the restoration of paintings were detailed handbooks with bibliographies, discussions of stable pigments, precise descriptions of inpainting methods and materials, and multiple approaches to particular inpainting problems. The writers did recommend oil retouching since they felt oil paint was easy to manipulate, but they were deeply concerned about colors shifting.

When oil retouching was recommended, it was with caveats. Christian Köster (1784-1851), a German painter and restorer, wrote the first book on the restoration of paintings, *Über Restauration alter Oelgemälde*, in three small volumes published between 1827-30. Köster felt you could use oil safely if you used only the purest materials and retouched over absorbent chalk fills.<sup>16</sup> Ulisse Forni (c.1820-1867), the official restorer for the Florentine museums, published the *Manuale del Pittore Restauratore* in 1866. He was completely against the use of oils on tempera paintings, but felt that they were the easiest to use on large losses in oil paintings.<sup>17</sup>

Whenever oils were recommended, furthermore, authors gave alternative materials and methods. Köster wrote that retouching with tempera and pigments ground in mastic were both possible substitutes.<sup>18</sup> Henry Mogford recommended retouching in oil in his 1851 *Hand-book for the Preservation of Pictures; containing Practical Instructions for Cleaning, Lining, Repairing, and Restoring Oil Paintings*. He added, however that

“It has been suggested that the use of body colours with a water medium would be the safest to prevent the change of colours in the repairs. It might perhaps answer in the bright painted skies in

landscape, water, and so forth, but it requires great artistic skill to manage its exact tone: there is no question of it being unchangeable, and this seems its only advantage. There is another method adopted in the restoration of damages, which consists of the use of powder colors with copal varnish, or varnish megilp.”<sup>19</sup>

Finally, Giovanni Secco Suardo (1798-1873), a northern Italian restorer and professional rival of Forni’s, wrote *Il Restauratore dei Dipinti* (1866-73). He described age testing a variety of drying oils, trying to find one that would not yellow. Since he did not succeed, he devised a drained oil inpainting system with a mastic/copal mixture as the medium. Secco Suardo felt that this system was very stable and wrote of it being unchanged on paintings he had treated twenty years previously. He acknowledged, however, that some of his colleagues did not approve of even drained oils. If one encountered this type of objection, Secco Suardo recommended tempera underpainting with only very thin drained oil glazes on top.<sup>20</sup>

### Specific training for retouching

As is surely becoming clear, by the end of the 18<sup>th</sup> century restoration was emerging as a distinct profession. For example, the Danish painter Jens Peter Möller was sent in 1810 by the Royal Danish Academy of Fine Arts to study restoration for three years at the Louvre in preparation for becoming the first official restorer for the Royal Paintings Collection.<sup>21</sup> One of the results of professionalism was that specific training and skills became required for inpainting. Although a restorer was, of course, still expected to be a good painter, new requirements demanded a range of virtues from patience, to humility, to subordination of the ego to the work of art. More importantly, though, Pietro Edwards and the Louvre commissions considered knowledge of old master techniques essential.<sup>22</sup> Jean-Michel Picault, a restorer and one of the commissioners, for example, wrote that,

“The restorer’s art and the painter’s art are in no way similar... a painter who can produce a masterpiece, will ruin masterpieces by another artist in trying to restore them... the most famous painter will substitute his style for Raphael’s... and the result of his retouching will be the creation of a monstrous work which will surely cause the painting to lose value... Successful restoration requires a specific course of preliminary study ... The restorer, who studies every master and school is not prepared to be, and should not be prepared to be, like a painter with his own style. He has sacrificed his own ideas to submit to the ideas of another; he no longer exists for himself...”<sup>23</sup>

This relationship between understanding old master techniques and successful inpainting was refined in the 19<sup>th</sup>-century literature. Köster’s book contained sections specifically on retouching tempera painting,<sup>24</sup> and in this context he included a long chapter on tempera technique by guest author Jacob Schlesinger, a restorer of early tempera paintings. The back of Köster’s book even contained an advertisement for a translation of Cennino Cennini. Köster’s approach was taken much further by Simon Horsin Déon (1812-1882), a restorer at the Musées Nationaux in Paris. The last section of his book, *De la Conservation et de la Restauration des Tableaux* (1851), was an overview of the techniques of European painting by school, country, and period with commentary on particular restoration problems and the best methods of approaching them.<sup>25</sup>

Recommendations for studying chemistry began a bit later, in the 1820s. By the time Forni was writing in the 1860s, he recommended not only books on the chemistry of artists’ materials (i.e., G.A. Chaptal’s *La Chimica Applicata alle Arti*, 1820), but technical publications such as the *Complete Handbook for the Color Manufacturer and Varnish Maker*, (1850 and 1862).<sup>26</sup>

### Development of a “less is more” principle

Despite (or perhaps because of) increasing professionalism, the 19<sup>th</sup> century was also the period of major restoration controversies. The most famous were the cleaning controversies at the Louvre and the National Gallery in London. Another contested area, however, was retouching, and conscious decisions were made to leave losses visible. Works of art were increasingly valued as historical documents, in part due to the rise of archaeology and the creation of national museums. Already in an 1830s restoration campaign of an

Amico Aspertini fresco in Lucca, the local arts commission instructed the restorer to leave large lacunae visible if these areas could not be reconstructed accurately.<sup>27</sup> In the 1870s, the art historian Giovanni Battista Cavalcaselle (1819-1897) was responsible for restorations of art works belonging to the Italian State, and he consistently wanted structural stabilization only. In work on the Giotto frescoes at Assisi only neutral toning was allowed.<sup>28</sup> His 1877 regulations for restoration work undertaken by the State declared, "It does not matter if you recognize a restoration, in fact, you should be able to recognize it, since what is necessary is respect for the original work at least for works belonging to the State. A lie, even a beautiful lie, must be avoided. Scholars should be able to recognize in a restored picture what is original and what is new..."<sup>29</sup> Around the same time and in a similar vein, the chemist Max von Pettenkofer (1818-1901) in a quest for a "scientific restoration" also wrote against retouching; saying that, "Whoever would treat a collection of documents – such as our picture galleries should be in the future for the history of art – in such a way that even the most trained and acute eye cannot recognize what is authentic and what is imitation, deserves prison or the galleys because they would be guilty of forging documents."<sup>30</sup>

In response to writing and directives against retouching, the formulation of a "less is more" principle began to emerge. The authors of the 19<sup>th</sup>-century instruction books repeated this again and again. Köster wrote, "Retouching is the last step. The less work necessary, the better. And if nothing is necessary, do nothing." Horsin Déon stated, "The best restoration is that obtained by a light, transparent touch which allows the master to appear wherever original still exists." Forni concurred, writing, "The best restoration is obtained from economic work which leaves intact all the original parts."<sup>31</sup> Finally, the director of the Louvre wrote an article on restoration at the museum in the 1860's and clearly stated reasons to avoid excessive retouching, "Our mission is to show the masters as they are, to honor them with their strengths and weaknesses...discreetly filling losses created by flaking paint without spreading color over the edges of the damage, this is all that restoration allows."<sup>32</sup>

## **Conclusion**

There is a long history of paintings restoration in Europe. There is also a long history of discussions, both philosophical and practical, on approaches to restoration. We often think of retouching from the past as being sloppy, heavy handed, and unsympathetic to the painting; making wholesale changes for reasons of taste and marketability. In fact there are many examples of this type of work, but this is not the whole story. I hope I have shown that there were sensitive approaches to retouching and sophisticated discussions about retouching. I think this knowledge provides a certain depth and perspective to our own work as conservators.

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<sup>1</sup> Vasari, G. 1991 translation. *The lives of the artists*. Julia Conaway Bondanella and Peter Bondanella, translators. Oxford: Oxford University Press, p. 269.

The painting, actually on panel, is now in the National Gallery, London. Recent x-rays have shown that under the Christ Child attributed to Sodoma are two earlier versions painted by Signorelli.

Henry, T. and Kanter, L. 2002. *Luca Signorelli: the complete paintings*. New York: Rizzoli, pp. 175-6.

<sup>2</sup> Bottari, G. G. 1754. *Dialoghi sopra le tre arti del disegno*. Lucca: Filippo Maria Benedini. One of Bottari's speakers quotes Vasari on Signorelli, Sodoma, and retouching, p. 242.

The antiquarian Luigi Crespi wrote in the mid-18<sup>th</sup> century, "it is better to see an old painting consumed and ravaged by time because at least the little that you see is pure and chaste ... (è preferibile vedere un antico dipinto, dal tempo consunto e corroso, poiché almeno quel poco che vede, vergine il vede ed illibato, che da mano oltre il dovere coraggiosa (per non dire di più) ritoccato e compito, discordante veggendolo, crudo e disformato)." G. Bottari, *Lettere pittoriche*, 1754-73, quoted in Vaccari, M. G. 1989. *Restauro a Firenze nel settecento: tra teoria e prassi*. *Kermes* 2(4): 39-44, p. 40.

Filippo Baldinucci wrote in *Notizie de' professori del disegno* (revised 1767 ed.) that Guido Reni "grew furious when he heard that any painter had dared to touch paintings by the old masters, even if torn and ruined; this was something that he would never undertake. (Dava nelle furie quando sentiva che alcun pittore avesse ardito di toccare pitture di antichi maestri, tutto che lacere e guaste; cosa che egli non volle mai fare)." Quoted in Forni, U. 1866. *Mannuale del pittore restauratore*. Florence: Successori le Monnier, p. 9.

<sup>3</sup> Conti, A. 1988. *Storia del restauro o della conservazione delle opere d'arte*. Milan: Electa, p. 12 and Ragionieri, G. *Simone o non Simone*. Florence: La Casa Usher, p. 26.

<sup>4</sup> G.P. Bellori's *Vita di Carlo Maratta* (1731) discussed the painter's use of pastels in the 1693-4 restoration campaign: "with a little lapis and pastel he perfectly restored the contours and the color (con un poco di lapis e di pastello è perfettamente ristorato i contorni ed il colore.)" According to the writers of the *Encyclopédie*, Maratta did this so that his retouching could be removed if a more worthy restorer were found.

"Carlo Maratta having been chosen the first painter in Rome and working on the ceiling of the Farnese Palace, on which Raphael had depicted the story of Psyche, wanted to retouch only in pastel so that, he said, if one day some one was found who was more worthy than myself to link his brush with that of Raphael, he could erase my work and substitute his own. (Carle Maratte ayant été choisi comme le premier peintre de Rome, pour mettre la main au plafond du palais Farnese, sur lequel Raphaël a représenté l'histoire de Psyché, il n'y veut rien retoucher qu'au pastel, afin, dit-il, que s'il se trouve un jour quelqu'un plus digne que moi d'associer son pinceau avec celui de Raphaël, il puisse effacer mon ouvrage pour y substituer le sien)."

Jaucourt. 1795. *Ecole Romaine (Peinture)*; Maratte, (Carle). In *Encyclopédie raisonné des sciences, des arts, et des métiers*, ed. Diderot and d'Alambert. Neufchastel. V.5, p. 330.

<sup>5</sup> Bellori wrote in 1695 that Maratta was,

"embarrassed, needing on the one hand to obey the pope and on the other not having the impudence to erase even one line of such a great man... he came up with a subtlety to obey the pontiff and to leave the work intact. He took chalk pastels ground in gum and with them painted in such a manner that it would remain durable a veil over the breast of the Virgin as the pope wanted; and whenever some one wanted to remove it with a sponge, the original color would return. (confuso, dovendo da un canto ubbidire il papa, dall'altro non avendo ardire di por mano e cancellare né meno un tratto di sì gran uomo,... pensò ad una finezza d'ubbidire al pontefice e lasciar l'opera intatta. Pigliati dunque colori di pastelli di terre macinate a gomma, con essi dipinse il velo sopra il petto della Vergine come voleva il papa, in modo che rimane duribile; e quando si voglia torre con la sponga, ritorna il color di prima)." Quoted in Conti, p. 108.

Bottari gives these words to Maratta in his *Dialoghi*,

"maybe with so sacred an authority [a text by St. Cyprian] I would have been able to stop the pope and induced him to relieve me of doing this thing which worried me for a month; however, without telling the pope anything concerning what I had decided to do, I made that bit of veil with chalk pastels ground in gum so that it could be removed at any time. (forse con un autorità così veneranda avrei fermato il Papa, e indottolo a dispensarmi a far cosa, che mi tenne un mese strubato; benchè senza dirgli niente di come avea pensato di fare, condussi quell poco di velo con pastelli di terra, macinati a gomma, sicchè si può tor via ogni volta, che un vuole)." p. 245.

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<sup>6</sup> Bergeon, S. 1993. Quelques aspects historiques à propos de restaurer ou dérestaurer les peintures murales. In *Les anciennes restaurations en peinture murales*. Paris: International Institute for Conservation of Historic and Artistic Works. Section Française. 9-30, pp. 24-5.

<sup>7</sup> Articles in *Ristaurazione delle pubbliche pitture assentita col decreto del Senato li 3 settembre 1778*. Quoted in Conti p. 164-6, 346.

Also Wolfgang Goethe discussed Edwards' studio at SS. Giovanni and Paolo writing, "The institute has the advantage that all the experimental findings made in this art [of paintings restoration] are collected and preserved.

The methods and technique of restoring each particular picture are very different, according to the various masters and the condition of the painting itself...The condition of every picture is first of all examined and assessed before it is decided what to do with it."

Goethe, W. 1790. Early paintings and recent restorations in Venice. In *Goethe on art*, ed. J. Gage. Berkeley: University of California Press. 124-9, p. 128.

<sup>8</sup> Article XIV of the rules set down for the restoration of the paintings belonging to the Venetian State, "Finalmente s'imegnano di non usare sui quadri ingredienti che non si possano più levare, ma ogni cosa necessariamente adoperata sarà amovibile da quelli dell'arte ogni qual volta si voglia." From *Ristaurazione delle pubbliche pitture assentita col decreto del Senato li 3 settembre 1778*. Quoted in Conti, p. 165.

<sup>9</sup> Pietro Edwards wrote specification for the restorer Antonio Florian for the 1816 work on Titian's *Assumption of the Virgin*. He stated, "The above mentioned restorations shall be made upon a ground of gesso, tempered with weak *colla di ritagli* and the parts to be repainted, as well as the indispensable reparation of portions of the old colour, shall be executed with varnish, the use of oil being absolutely excluded..." The bill of expenses accompanying the contract indicated that the prescribed varnish in this case was mastic.

Contract transcribed by M. Merrifield. 1967 (reprint of 1849 edition). *Original treatises on the art of painting*. Dover, New York, p. 876.

<sup>10</sup> Conti, p. 187.

<sup>11</sup> "Direbbesi restaurare, o resarcire, o riddurre a bene essere, il raccomandare che si fa qualche volta alcuna piccola parte di pittura anche d'eccellente Maestro che in alcun luogo fusse scrostata o altrimenti guasta, perché riesce facile a maestra mano; e alla pittura non pare che altro si tolga che quel diffetto, che, quantunque piccolo, par che le dia molta disgrazia e discredito. Molti però, non del tutto imperito dell'Arte, sono stati di parere che l'ottimo pitture né punto né poco si ritocchino, anche da chi si sia, perché, essendo assai difficile che o poco o molto, o subito o in tempo, non si riconosca la restaurazione per piccola che sia, è schietta va sempre accompagnata con gran discredito."

Baldinucci, F. 1681. *Vocabulario toscano dell'arte del disegno*. Florence.

<sup>12</sup> "Bien des gens se mêlent de repeindre les endroits endommagés des tableaux, dans le dessein de les réparer; mais rein n'est si difficile à exécuter de manière que la nouvelle couleur ne fasse pas des taches. On est obligé de salir les couleurs que l'on couche, pour trouver le vrai ton de l'ancienne; l'huile que l'on emploie noircit et produit ces taches. Il faudroit repeindre à détrempe, pour ne pas s'exposer à cet inconvénient; ce seroit le moyen le plus sûr, si la détrempe pouvoit s'unir intimement avec la peinture à huile. On lit dans l'Ouvrage de Messieurs de Caylus et Majault sur la peinture à l'encaustique e à la cire, page 131, que les couleurs préparées pour la peinture à la cire, conviendroient beaucoup mieux que les couleurs à l'huile pour restaurer les vieux tableaux. M. le Lorrain, peintre de l'Académie, l'a essayé avec un succès singulier. Il a repassé des vieux tableaux de cette manière, de façon qu'il est presque impossible de retrouver les endroits réparés et repeints."

Pernety, A-J. 1772 (reprint of 1757 edition). *Dictionnaire portatif de peinture, sculpture et gravure: avec un traité pratique des différents manières de peindre*. Geneva: Minkoff Reprint, p. 499.

<sup>13</sup> The early committee work defining the proper care and restoration of paintings did not stave off controversy. In 1797a painter/politician named Anthelme Marin accused the Louvre of storing paintings in stairwells and humid rooms and of damaging paintings through incompetent restoration. The Directory ordered an official inquiry and appointed a committee of 31 artists and experts to examine Marin's charges. The report was an official government publication - *Musée central des arts: pièces relatives à l'administration de cet établissement*. Two years later rumors again circulated of misconduct at the Louvre and the administration responded by appointing four experts from the National Institute to supervise the restoration of Raphael's *Foligno Madonna*. The structural work was done by François-Toussaint Hacquin and the cleaning and retouching by Mathias Roeser. The supervising experts were the painters François

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André Vincent and Nicolas-Antoine Taunay and the chemists Claude-Louis Berthollet and Louis-Bernard Guyton de Morveau.

McClellan, A. 1995. Raphael's *Foligno Madonna* at the Louvre in 1800. Restoration and reaction at the dawn of the museum age. *Art Journal* 54(2): 80-5.

<sup>14</sup> "Ceci me porte à inviter les chimistes, pour la perfection de l'art, à faire en sorte de découvrir le moyen d'allier la poudre des couleurs avec un liquide qui remplace l'huile, sans avoir les mêmes inconvénients, qui sont de pousser à la superficie et de dénaturer les couleurs en absorbant leur éclat."

Émile-Mâle, G. 1956. Jean-Baptiste-Pierre Le Brun (1748-1813). Son rôle dans l'histoire de la restauration des tableaux du Louvre. *Paris et Ile-de-France, Mémoires* 6:371-417, p. 402.

<sup>15</sup> Wagner, C. 1988. *Arbeitsweisen und Anschauungen in der Gemälderestaurierung um 1800*. Munich: Callwey, p. 28.

<sup>16</sup> Köster, C. 1827-30. *Über restauration alter Oelgemälde*. Heidelberg: Christian Friedrich Winter, V. 1, pp. 27-8 and V. 3, pp. 16-17.

<sup>17</sup> Forni, pp. 88-9 and 143-5.

<sup>18</sup> Köster, V. 3, pp. 17-18.

<sup>19</sup> Mogford, H. 1851. *Handbook for the preservation of pictures; containing practical instruction for cleaning, lining, repairing, and restoring oil paintings*. London: Winsor and Newton, pp. 63-4.

<sup>20</sup> Secco Suardo, G. 1918 (written between 1866-73). *Il restauratore dei dipinti*. Milan: Ulrico Hoepli, p. 500 and 536.

<sup>21</sup> Scharff, M. 2000. Insight into early nineteenth-century painting conservation in Denmark. In *Tradition and innovation, advances in conservation, contributions to the Melbourne Congress 10-14 October 2000*, ed. A. Roy and P. Smith. London: IIC.

<sup>22</sup> Edward's thoughts on this subject are recorded in *Progetto per una scuola di restuaro* written after 1819. Conti, p.187.

<sup>23</sup> Picault was criticizing the idea that painters only were capable of directing the national museum. The text in French is as follows,

"Observe, au contraire, ledit Picault, que l'art de peindre et celui de restaurer ne se ressemblent en rein; que le peintre qui peut produire un chef-d'oeuvre, gâtera les chefs-d'oeuvre d'un autre, en voulant le restaurer; que dans un tableau malade et défectueux, le plus célèbre peintre substituera sa manière à la manière de Raphaël, des Carrache et de Titien; qu'il ne résultera de sa retouche qu'un assemblage monstrueux dont l'effet assure sera de déprecier le tableau...que pour restaurer avec succès, il faut une étude particulière de preparation première, d'opération aussi utile que indispensable, de même qu'une habitude consommée des manières et préparations des maîtres de chaque école qu'il s'agit de retrouver, si elles sont perdues, et de conserver, si elles ne sont qu'altérées, et rendre, en un mot, jusqu'aux nuances les plus légères qui caractérisent, et chaque école et chaque maître...le restaurateur qui étudie tous les maîtres et toutes les écoles ne s'est point fait, et n'a point dû se faire comme le peintre, une manière à part. Il a fait le sacrifice de ses propres idées pour se plier aux idées d'un autre; il n'a plus d'existence à lui..."

Picault. J-M. 1793. *Observations de Picault, artiste restaurateur des tableaux à ses concitoyens sur les tableaux de la république*. Paris: Imprimerie de H.J. Jansen, pp. 37-8.

<sup>24</sup> Köster reminded restorers to take into account tempera's delicateness of color, fineness of brushstrokes, and undermodeling of flesh tones, adding, "in truth tempera painting has reached such a degree of delicacy that whoever sees it must be astonished if he only knows oil painting. (Wirklich hatte die a tempera Malerei einen Grad der Feinheit und Delicatesse erreicht, worüber der jenige erstaunen muss, welchem von jeher nur die Oelmalerei im Sinne gelegen)." V. 2, p. 18.

<sup>25</sup> For example, early Italian paintings tended to be in good condition since they were executed with sound techniques and often remained at site for which they were commissioned. The problems encountered were usually problems with the supports or the paint layer covered with centuries of dirt, pp. 145-6.

Horsin-Déon, S. 1851. *De la conservation et de la restauration des tableaux*. Paris: Chez Hector Bossange, pp. 127-214.

<sup>26</sup> Forni himself wrote a long section on pigments, describing production, properties, stability, and notable uses by certain artists, pp. 285-427.

<sup>27</sup> Conti, p. 246.

<sup>28</sup> Levi, D. 1988. *Cavalcaselle, il pioniere della conservazione dell'arte italiana*. Turin: G. Einaudi, pp. 337-9, 347.

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<sup>29</sup> “Poco importa che si conosca il restauro, che anzi lo si dovrebbe conoscere, ma quello che è necessario si è che sia rispettato l’originale della pittura almeno nelle opere appartenenti allo Stato. La bugia, anco detto con bel garbo deve essere tolta di mezzo. Lo studioso potrà conoscere da un dipinto restaurato a questa maniera quello che è originale da quello che è nuovo...” Levi, pp. 350-1.

<sup>30</sup> From *Über Ölfabre* 1870, quoted in Althöfer, H. 2002 (Italian translation of 1974 German text). *La questione del ritocco nel restauro pittorico*. Padua: Il Prato, pp. 20-1.

<sup>31</sup> “Die malerische Herstellung macht allemal den Beschluss. Je weniger Einwirkung dabei nötig ist, desto besser, wo keine nötig ist, bleibt sie hinweg.” Köster, v. 3, p. 24.

“La meilleure des restaurations est celle qui est obtenue par un travail léger et transparent qui laisse le maître apparaître partout où il existe encore.” Horsin-Deon, p. 116.

“Il restauro migliore è quello ottenuto da un lavoro economico, che lascia intiere tutte le parte dell’originale.” Forni, p. 153.

<sup>32</sup> “Notre mission, encore une fois, est de montrer les maîtres tels qu’ils sont, de les vénérer avec leurs qualités et leurs défauts... Retoucher en quelque sorte avec une aiguille les trous qui feraient une tache insupportable, combler discrètement les lacunes occasionnées par la chute des écailles sans étaler la couleur sur les bords de la cicatrice, voilà toute que la restauration premise.”

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## **CESARE BRANDI AND ITALIAN CONSERVATION THEORY:**

### **IN AND OUT OF CONTEXT**

Joan Marie Reifsnnyder

Over the past decades, Italian conservation practice and its related ethics have been integrally tied to the theories and writings of Cesare Brandi. Today in any part of the world, when making reference to Italian conservation-restoration practices, 'Brandian Theory' is inevitably named. In Italy, as elsewhere, conservation theory is constructed from a web of both tightly and loosely woven threads, each individually intertwined and twisted with personal experiences, practicalities and expedients. Brandi was a classical purist in the pursuit of Truth as the main goal in art and its conservation. However, often the theoretical versus the practical is like taking a quotation out of context: they can be intrinsically related, but may have nothing to do with the other. Nevertheless, within the context of day-to-day working practices and the natural evolution of ideas and knowledge, some of the concepts of Brandian conservation theory can certainly be broadened.

#### **Who was Cesare Brandi?**

It is important to keep in mind the historical, philosophical, and personal context of Cesare Brandi's writings in order to view them in a current-day context. Cesare Brandi was a Siennese art historian, born almost a century ago in 1906. He graduated with a Law degree from the University of Siena, and a year later in 1928, he completed a Humanities degree at the University of Florence, with a concentration in art history.

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In 1930, he began a career in the administration of the State Superintendency for Antiquities and Fine Arts in Siena. In his function of what might be termed a 'fine arts civil servant', he became a territorial inspector charged with cataloguing, studying and managing the artworks and monuments in a given geographical area. After time spent 'in the field', at Bologna, Rome and Rhodes, Brandi was transferred to Rome and together with Giulio Carlo Argan, was given the responsibility of setting up the Istituto Centrale del Restauro (Central Restoration Institute) in 1939, the same year he became its first director. He died in his home in Siena in 1988.

### **Historical context**

Many of Brandi's philosophical foundations are imbedded in the works and ideas of Italian philosopher, Benedetto Croce. Croce embraced the late eighteenth-century German philosophies of both Hegel and Kant. Many of the young intellectuals in Italy at the time, especially those concerned with such concepts as Beauty and Aesthetics, rallied around Croce and his views on Idealism and Truth. Croce professed that the miracle of art lies not in the externalization of the idea, but in its power to form images; images being Art's only wealth. Externalization is a matter of mechanical technique and manual skill (Durant 1926).

Furthermore, contemporary art of the time was changing its old standards. In this change, physical materials became less significant for the artist, reaching the point that their insignificance was manifested by the use of 'junk' materials, scraps and found material, illustrating – and at the same time – highlighting the intrinsic dichotomy between object and idea. "Every thing the artist spits is art", remarked Kurt Schwitters (Lynton 1982, 127). It is not the form, the matter, the content, the category, and the skill that makes a product art, but that the artist knows it as art.

Brandi was living in a European country that had just come out of a First World War. The intellectual and moral forces in the country were weakened, and there was general disorganization in the schools and universities. He grew up during the emergence of the Italian Fascist Party, and his professional career matured as a functionary of the Italian government. At the time, the Fine Arts' superintendencies in Italy were under the Ministry of Education and the minister, Giuseppe Bottai, was instrumental to Brandi's period at the Istituto Centrale del Restauro. One of the

principal mandates of the Central Institute was to organize and activate the first formal State restoration school in the country. Therefore, as director of the first institute and school for restorers, a major aspect of Brandi's career was his ability to function well under a strongly Fascist minister – albeit an intellectual - in a heavily centralized, top-down management structure. The strongly nationalistic feelings at the time called upon the government to centralize and institutionalize all aspects of Italian life. Minister Bottai was not a fascist who directed himself toward the rural masses and the factory workers. He was part of and concerned with the elite bourgeoisie. He wrote on Modernness and Tradition in contemporary Italian art for the publication *Le Arti*. He professed that Italian art criticism was the spearhead for defining a new mental and moral dimension in the country. The divarication separating art, the absolute movement of the spirit, and the concrete work of the artist is found in the concept of race. The relationship between the concept of art and the concept of race in Italy during this period was heralded by a new Italian consciousness, aware of its tradition and resolute in its civil mission. The State amalgamated in itself all the positive and underlying characteristics of what it was to truly be Italian. Notwithstanding this ambience, Brandi's writings are accompanied by a tendency to take a step away from the politics and Fascist nationalism that had nurtured and generated his writings. It was important to go beyond a casual vision of art to the transcendental level of artistic creation; the biological foundation of race had to be transformed into the spiritual foundation of race in order to grow and disseminate, and this required the acquisition of an 'historical sense of race'. These directions echo aspects of Croce's absolute idealism. The State is the repository of history and memory, and the tutelage of these values is the specific responsibility of the State. In fact, the Italian government did not simply request collaboration from artists in nationalistic goals through image-making, but required it. The work of the artist complemented the functioning of the mechanism that organized and controlled society in general. Science and philosophy were taking the first steps in identifying and moving towards new directions in research. Within the educational system, in order to be truly modern, the State had to depend upon a class of technicians whose specific training was qualified and diffused throughout the territory. Another requirement was that a school of the populace must have a single concept of culture and character in work and thought. The new humanist fascist had to balance the instances of scientificity with the up-dated concept of the ideal, and transpose it into a key for the masses (Borsa 2000).

## Brandi's writings

Even though today Brandi is principally known for his writings about restoration theory, his extensive publications range from travel journals to criticism on contemporary art. The foundations for his restoration theories, especially regarding painting restoration, are found in his 1945 book entitled *Carmine o della pittura*, which presents a series of dialogues on painting.

In the conservation-restoration field, Brandi's most famous written work is *Teoria del restauro*, published in 1963. This brief, but essential work, is actually a collection of some of Brandi's most important essays published between 1940 and 1960, during his years as director of the Istituto Centrale di Restauro. In these essays he elaborates his fundamental thoughts on the conservation-restoration of artistic works.

Brandi opens his book with an essay on the 'Concept of Restoration'. He states that: "it is generally understood that restoration is any kind of intervention that permits a product of human activity to recover its function" (Brandi 1963,3; trans. Price et al. 1996, 230). This statement is the synthesis and pairing down of other, earlier 'definitions' appearing in the Italian *Universal Encyclopedia on Art*, for which Brandi wrote the definition of the term: 'restauro'. At the time, he defined restoration as: any activity undertaken in order to prolong the conservation [here he uses the term 'conservazione' rather than the more traditional Italian term 'restauro'] of the physical means to which the image is entrusted for its transmission and consistency, and the concept can be extended to include the reintegration as an approximation of the mutilated artistic image. The evolution of Brandi's thought about the definition of restoration stems from a specific need to align the evolution of restoration with the technical-scientific world without abandoning its humanistic aspect. His definitions and attitudes towards restoration are synthesized in his revised version of the encyclopedia entry in 1963, the same year his book on restoration theory was published. This definition simply states that any behavior towards a work of art – including restoration – is dependent upon the recognition of the art work as a work of art. These attitudes about restoration and the artwork can be further elaborated:

“The artistic object in which materials triumph over image we call handicraft: the jewel, the vase, the plate: not the picture or the statue” (Brandi 1949, 183). There is restoration applied to industrial products and restoration as pertains to works of art. For industrial products as well as ‘craft’ products the purpose of restoration is to re-establish the functional properties of the product. Therefore the restoration is tied to this goal. However, in works of art, the re-establishment of the functional properties is secondary to or a consequence of the restoration of the Work of Art. Therefore, restoration is the methodological moment in which the work of art is appreciated in its material form and in its historical and aesthetic duality, with the intention of transmitting it into the future.

This leads us to what Brandi refers to as the ‘First Principle in Restoration’: **only the material of the work of art is restored**. The physical medium is one and the same with the image: it is not a question of image on one hand and materials on the other. Part of the materials will function as support and other parts will transmit the image. The physical materials needed for the transmission of the image, are a means and not an end.

Brandi’s second principle of restoration states: **restoration must aim to re-establish the potential unity of the work of art as long as this is possible without producing an artistic or historical forgery, and without erasing every passage of time left on the work of art** (Brandi 1963; trans. Price et al. 1996).

### **Istanza estetica-Istanza storica**

Brandi’s thoughts regarding the passage of time and the work of art are essential to his theories on restoration. He states that over time a work of art accumulates its ‘history’ while still maintaining the original component behind its creation and construction: the aesthetic. From an historical point of view, any addition to the work is a testimony of human activity and therefore part of the history of the work. This assertion encompasses all those elements, in whatever form, occurring to or affecting the artwork, including retouching and patina. Brandi uses the terms, *istanza estetica* and *istanza storica* to separate and define these two essential components in the life of the work of art. Brandi’s use of the term ‘*istanza*’ is not an easy concept to translate. It cannot be fully described by terms such as ‘moment’, ‘instance’ or ‘aspect’. The *istanza estetica* relates to all those actions, materials and intentions behind creating the ‘aesthetic component’ of the work, i.e.: the image. This is not a brief moment of creation by the artist,

like a snapshot embodying a final aesthetic result. The *istanza estetica* is the process of all that goes into the making of an object, in order to create an image. Brandi goes on to state that the aesthetic component of the artwork is balanced and completed by the *istanza storica*, the continuation of the 'life' of the art-object, and all that 'intervenes' both passively and actively upon it. Here again, the meaning of '*istanza*' is not limited to a brief moment or a simple aspect of the work, but is a vital component in its being and evolution. In considering the totality of both the physical (*estetica*) and intangible time (*storica*) components of an artwork, Brandi considers the *istanza estetica* and the *istanza storica* to be equally vital elements of the whole.

Nevertheless, the underlying intention behind the work is that of creating the 'aesthetic', and it is this component that takes precedence over the historical one. The historical and the aesthetic components of the work must be balanced in our approach to treatment. However, Brandi continues, if in treating a work we are confronted with a situation that requires a choice between the two, then the work's original component, the 'aesthetic', must weigh out.

Regarding patina, Brandi believes that from an aesthetic point of view, patina is an imperceptible muting placed on materials – by both time and the artist – and that is compelled to remain subdued within the image. It is this role that then provides the practical measure for the point to which patina has to be brought and for the equilibrium that must be regained'. Brandi 's point of view regarding patina and equilibrium, is the basis for the 'differentiated' or so-called 'partial cleaning' that has been subject of long-term debate and discussion.

The 'Cleaning Controversy', initially disputed on the pages of *The Burlington Magazine* in the late 1940s and early 1950s, was principally a result of Brandi's criticism of the cleaning attitudes and methods at the National Gallery in London. His article on 'The Cleaning of Pictures in Relation to Patina, Varnish and Glazes' in July of 1949, received public response in the same journal from Neil MacLaren and Anthony Werner of the National Gallery, a year later in July of 1950 with the article: 'Some factual Observations about Varnishes and Glazes'.

Brandi chose, however, not to pursue the 'cleaning controversy' in international territory. His formal rebuttal to MacLaren and Werner is contained in the Central Institute's 1950 Bulletin, in an essay entitled 'Some factual

observations about varnishes and glazes', reiterating the MacLaren/Werner title, but making his response in mother tongue. Not only did Brandi's response in Italian remove the confrontation from wider international circles, it also placed it firmly on home ground and in his own language, two aspects that should probably not be underestimated in this diatribe. Equally significant, is the importance that Brandi gives to what he seems to consider the 'last word' on the subject. The essay was republished as Appendix 6 in *Teoria del restauro*, along with his original Burlington essay, now in Italian, and the most important selections of writings during his twenty-year career at the Central Institute.

### **Cultural and historical 'snapshot'**

In this brief attempt to approach Brandi's theories, I believe it important to summarize some of the main cultural-historical factors contributing to their development and divulgation.

- Brandi was in a cultural/historical situation that had a great need for standards and control in the aftermath of the First World War.

The nationalist regime in Italy took on not only the political duty of the organization and standardization of the populace, but also imposed the moral and ethical standards.

- The dissemination of what was art and what was cultural, in terms of nationalist concept of 'race' was the priority and duty of the State.
- The creation of the centralized, governmental institute providing for unitarian training and execution of restoration of works of art was born from this political, social and cultural atmosphere. The Central Institute and the codification and standardization of what was restored and how it was restored, reflected this philosophy.
- Unity in restoration interventions and treatments was also necessary in order to break from the past; a past characterized by centuries of painter/restorers 'improving' artworks and in particular the nineteenth-century

'romantic' restorations. Unity and standardization of approach were themes of the entire political, educational and cultural environments.

- Standards were changing in contemporary art as well, and the 'work of art', as traditionally conceived, was undergoing transformation.
  
- In the context of standard practice, science seemed to minimize the 'subjectivity' of treating a work of art; there was a more objective, analytical, technically 'detached' context, a context in which the restorer became a 'technician' and the critical evaluation of the image as Art was assigned to the art historian/critic. Just as the role of the State was to morally guide the populace, the role of the art historian was to guide and unify the approach and methodology for restoration.

I do believe that in taking his theoretical distance from past concepts and attitudes associated with restoration in Italy and in embracing of a wider view of not only the technical, but critical and scientific character of restoration, Brandi missed an opportunity over his long career in not attempting to modify the general use of terminology from the traditional Italian term 'restore' to the more encompassing 'conserve'. In his references to the theory of unity, passage of time and historical-aesthetic components of the artwork, Brandi is, in fact, talking about 'conservation' rather than 'the return to or renewal of a previous state'.

During this period of change and fluctuation, I believe that Brandi pulled together all the aspects relating to the work of art, the work as object, the work as ideal, the work as image and created a unified basis for restoration practice.

Today, this basis is still essential. However, as has been recently written: the greatest disservice that we can do to Brandi and others (Philippot, Procaccio, Baldini), is to assume that their positions constitute a kind of intangible and untouchable 'rule of law'. Instead, as has been recently stated, "we must climb up upon their shoulders to see even further" (Schudel 2003, 22).

Calls for seeing 'further on in the distance' come from contemporary theorists/critics such as Giorgio Bonsanti (Bonsanti 1997) and Salvador Muñoz Viñas (Muñoz Viñas 2002), who contend that thanks to the past fifty years of 'standardized' conservation theory, today theory has 'come of age'; it has matured beyond its toddler years, and to Brandi's affirmation: 'only the work of art is restored', the growing youngster retorts: well then what is art? Is art only what is recognized as art, as Brandi states? Is a painting 'restored' and not 'repaired' because it has the label 'Painting'? Is a painting always a Work of Art?

As Bonsanti queries: Do I repair a chair, but restore a chair by Brustolón ...or for that matter by Thonet or Mies van der Rohe? Are the functionality and materials in Galileo's telescope restored or repaired? Is it the object that dictates the intervention or the attitude with which the intervention or treatment is undertaken?

Bonsanti summarizes:

"In fact, a more useful theory in today's context would acknowledge as the common denominator in restoration, the attitude of the restorer, independent from the characteristics of the object to be restored: an attitude based on the spirit of research and grounded in the highest professionalism. 'Restauro' is considered as such, not because it is performed on a category of objects defined as artworks, but because the operations performed, from the beginning to the end, respond to that complex attitude...made up by those technical, methodological, scientific, and professional components...that we, those involved in conservation, know well, and acknowledge as ours" (Bonsanti 1997, 111).

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## CATALYTIC CIRCUMSTANCES FOR INNOVATION IN PAINTINGS CONSERVATION

Joyce Hill Stoner\*

In 1992 I carried out a survey of Fellows and Professional Associates of the American Institute for Conservation of Historic and Artistic works engaged solely in paintings conservation to determine the areas of published research that have had the most impact on actual practice. I presented a paper for the AIC Denver meetings in 1993 and discussed the results in the *Journal of the American Institute for Conservation* in 1994 (Stoner 1994). According to the survey respondents, the innovators who had most changed the way we carry out practical tasks in the treatment of paintings were (in alphabetical order): Gustav Berger on lining adhesives, E. René de la Rie on varnish, Robert L. Feller on varnish, Gerry Hedley on lining supports and cleaning, Elizabeth Jones and Nathan Stolow on solvent action and cleaning, Marion Mecklenburg on study of lining supports and the impact of temperature and humidity on stretched paintings, and Richard Wolbers on cleaning materials.

Since the focus of the 2003 AIC meeting was “history,” I thought it would be interesting to return to this topic and ask what were the catalytic circumstances that caused these innovators to carry out their research and to make their discoveries? To aid me in this task, I will be quoting from some of the more than 100 transcribed FAIC history interviews, recent telephone interviews, or published works by these researchers. I have also used two books that study creativity and invention.

One useful book has been *Creating Minds* by Howard Gardner (Gardner 1993). Gardner has authored twelve books on art, mind, and brain studies and presents the following triangular chart to explain the superstructure needed to account for creative activity. Gardner’s chart has three core elements, one at each corner, to emphasize the interaction among these nodes:

Individual  
(as a child and as a master)

Other Persons  
(*Childhood*: family, peers)  
(*Mature Years*: rivals, judges,  
supporters in the field)

The Work  
(relevant symbol systems  
in domain/discipline)

Each innovator was likely to have had catalytic events in his childhood; Einstein’s father showed him a compass, and the little boy was fascinated. Other persons are important in childhood and in later years as mentors or as competitors. Mozart’s father introduced him to music. Contemporary rivals may also spur creativity. Innovators were often “tinkerers” of sorts at childhood. Richard Wolbers noted that his grandfather was a tinkerer whom he admired greatly. Many of our innovators carefully credited key mentors in history interviews or in their own publications. Gardner continues that each individual must have a field or domain in which to invent or practice, with its unique “history and politics.” There must be a need and practices that should be investigated and revised; for us it has been the “varnish problem” or the lining or cleaning cycles. The field must ultimately judge the long-term usefulness. Some innovators, such as Robert Fieux, created the “Fabri-Sil” lining system which did not find long-term acceptance. Creativity is a function of interactions among these three nodes. I noted with interest that according to Gardner, we would expect each of our innovators to find pleasure in the problem solving itself; he considers this much more important than any possible external rewards. This is fortunate as no one is likely to earn great sums of money from innovations in paintings conservation.

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Other important contemporary influences in Feller's early years were the conservators at the Fogg Art Museum, Harvard University. He told Cornman:

I'll never forget the reception there and the atmosphere there, that it was an exciting place and one of the great laboratories in the history of conservation, and I was able to see it in its full activity. The day I arrived, they were just starting the work on chlorine dioxide bleaching. Betty Jones came by and said, "Oh, come on down the hall. Mr. Gettens is going to perform an experiment!" I will never forget that atmosphere . . . an atmosphere of excitement and good fellowship, all working together as a team. [The conservators] could not have been more generous and hospitable to a newcomer, and, I must say, this has been in my experience one of the outstanding characteristics of John Gettens. I have never met anybody who is more generous to newcomers. Gettens always opened up his notebook, and his records, and his research to almost anybody who would come.

Do we remember to behave in that way? Are we as generous to newcomers as John Gettens was to Bob Feller?

"Not long after that I got to know the Kecks," Feller continued . . .

They invited me to come to their home on State Street in Brooklyn and talk about chemistry . . . give my varnish talk to people that they would invite in for a buffet dinner. And in their basement living room, we would put up a screen and projector and, if I may say so, we talked chemistry. I think this was a very thrilling time for all concerned. They could gather 15-20 people very easily.

Caroline Keck says of Bob Feller that he was one scientist who truly tried to work with and understand the conservator's problems. She notes that he never put himself "above the bench worker" as she feels other scientists may do (Keck 2002).

How did the Feller-Stolow Jones book come about? Dr. Feller noted that Richard Buck was the remarkable editor for the book. Feller noted, "I had known of Stolow and of his work. I told Dick Buck that there's a guy in England who has done some very important work on solvent damage...he was practically fresh off the boat and came and gave the heart of his Ph.D. thesis at the conference in Oberlin in spring of 1957."

Dr. Nathan Stolow noted in his FAIC oral history interview with me in 1976 that he had every intention of becoming an artist, and he had studied art in Montreal where he was born. His parents came from Russia just after the Revolution. Stolow had been told that he had talent for painting, but like Feller he majored in chemistry instead. Stephen Rees Jones served as his mentor and helped Stolow devise a research topic in solvent action during the cleaning of paintings for post-graduate study. Stephen Rees Jones also mentored Gerry Hedley. According to Stephen Hackney's "Introduction" to *Measured Opinions*, the environment created by Stephen Rees Jones "allowed students with backgrounds in science, engineering, art history and fine arts to combine their skills and knowledge" (Hackney 1993).

Elizabeth Jones, who was interviewed for the FAIC file by Tom Chase in 1975, noted that she minored in studio art at Vassar and went for two years to the Art Students League in New York. During the war she was assigned to a factory unit called "Experimental Research" and worked on "hush hush aircraft diesel engines." She particularly credits Morton C. Bradley, Jr., who "first used the re-forming technique systematically as a preparation for cleaning." She noted that Caroline Keck had taken her on as an apprentice at Brooklyn and was therefore another mentor.

Feller, Stolow, and Jones collaborated to create the seminal painting conservation reference *On Picture Varnishes and their Solvents* (1959). Feller noted that the copyright went to the press of Case-Western Reserve and added, "Of course we co-authors have never taken any royalties." As Gardner wrote, the pleasure for innovators comes from solving the problems, not from material rewards.

Since there was not time in my AIC twenty-minute presentation to give a full biography with quotes for each of our innovators I presented instead vignettes and themes. The three listed above, Feller, Stolow, and Jones, each had mentors and willing collaborators. This should be a reminder to all readers about the importance of taking the time to mentor and teach.

In his 2000 book on *Conservation of Paintings: Research and Innovations*, Gustav Berger, who invented BEVA 371 and had the top-ranked statistical impact on lining adhesives in my survey, credited William Suhr as his mentor. Berger worked for William Suhr from 1964-67 and noted, "Since I had gained the reputation of a troubleshooter, Suhr asked me to formulate an adhesive that would be stronger than wax, free of the hazards of aqueous glue-paste, stick to oil paint, and be reversible" (Berger 2000). Berger also painted when he was young; he even had an exhibition of his paintings in Vienna before he left, when he was only 18. He had trained in photogrammetry and made maps from photographs in Israel. As Hindle would agree, Berger noted in his history interview with me in 1976, "Photogrammetry is very good training for restoration. As a map maker you must have tremendous control of line drawing; photogrammetry is really perspective." He also had strong family influence, an element of the Gardner chart; his father and grandfather were the presidents of the Art Dealers Association in Austria.

Another strong citation of a mentor came from E. René de la Rie. In the acknowledgements for his 1988 dissertation on *Stable Varnishes for Old Master Paintings*, de la Rie wrote, "I owe my greatest debt to John M. Brealey. He made me aware of the 'varnish problem' shortly after he hired me as his Research Chemist and has been unflaggingly enthusiastic about the project ever since" (de la Rie 1988). Richard Wolbers also credits John Brealey with helping to inspire him to seek a different way to "unpack" the layers of old varnish and grime on a painting (Wolbers 2003).

René de la Rie was a close second to Dr. Feller for work impacting our treatments of paintings according to Reedy's statistical analysis of my 1992 surveys. In his history interview in January 2003 he noted that his parents ran a marina near Amsterdam and he grew up sanding, scraping, painting, and repairing, perhaps a partial source of his spatial thinking. In 1982 he moved to New York to occupy the laboratory in the paintings conservation department at the Met that had been designed by Nathan Stolow, and he read Feller's book. De la Rie noted that his "premise pretty much from the start was to look into low molecular weight resins and to try to use stabilizers to slow down degradation." Both Feller and de la Rie had been told they could pretty much help out the conservators in any way they wanted. Perhaps writing one's own job description is another stimulant to the inventive mind.

Gerry Hedley was the only innovator mentioned in my survey who worked in both structural problems and varnish problems. Since he died in a mountain climbing accident at the age of only 41, we have no interview with him. According to an obituary notice written by David Bomford, Hedley was educated in mechanical engineering and already had a highly developed interest in art when he went to study paintings conservation at the Courtauld with Stephen Rees Jones. Bomford noted that there was always something impenetrable about Gerry, something of the restless mystic. Gerry loved traveling; he and his wife Lynda were expert skiers and top-class rock climbers and would go to Wales or the Alps as often as they could. I don't know enough to say whether or not mountain climbing is related to spatial thinking, but it seems that it might be.

For consideration in the time I have left, there are two more innovators who scored in the top group of my 1992 survey: Marion Mecklenburg and Richard Wolbers. Mecklenburg has lectured to the students at Winterthur on a number of occasions. He noted in a telephone interview in February 2003 that "no one could give me a reasonable answer for what was happening" as he examined paintings during his conservation internships in the 1960s in the Washington area. He ended up finishing a B.S. in 1970, an MS in 1972, and a Ph.D. in 1984 to investigate the mechanical behavior of fabric-supported paintings. His research first published in 1982 was supported in part by the National Museum Act; do we have enough such support for research by our innovators now? I think we can say a thumping "no" to that.

Richard Wolbers first began out-of-the-box thinking in the photographic materials block taught by Debbie Hess Norris and thought about using enzymes for solving problems in photograph conservation.

As Hindle notes about inventions in the 19<sup>th</sup>-century U.S., “Americans moved frequently from job to job, even within a single establishment. This prevented them from developing the highest level of skills but gave them understanding of ranges of related operations that encouraged inventiveness and improvement” (Hindle 1981). I had an ongoing argument with John Brealey, former head of paintings conservation at the Metropolitan Museum of Art, about whether a paintings conservation student should study only paintings conservation as in the curriculum of the Hamilton-Kerr Institute, or go through the Winterthur/University of Delaware Program in Art Conservation “block system” of learning a little bit about many materials before in-depth study of a specialty. Hindle would, I think, support the block system, at least for inspiring innovators. Richard had previously worked in medical research and then earned an MFA in painting and art criticism. During his Master’s-level study in conservation, he had one internship supervisor who did not favor mixing basic solvents together. Wolbers, like Mecklenburg, thought, “there must be a better way” to remove a vast variety of unwanted surface grime, varnish, and other coatings on paint surfaces. One of Archetype Publications’s best sellers is now Wolbers’s book, *Cleaning Painted Surfaces: Aqueous Methods* (Wolbers 2000).

What can we conclude from any of this? Why was there only one female in the eight innovators chosen by the survey respondents: Elizabeth Jones? If Hindle is right, it may be part of the gender studies trope of the absence of mechanical arts and spatial thinking in the activities of young girls. Gardner’s studies had only one woman, Martha Graham, in the seven creative minds he chose to study. Gardner cited, “obstacles stemming from prevalent attitudes and expectations in a male-dominated creative world.”

Based on the case histories above, mentoring—for males or females—is clearly a key factor. If you want to BE an innovator, you should draw, draw, draw. (James McNeill Whistler had the motto, “no day without drawing.”) Or perhaps fix things in a marina or go rock climbing. If you want to nurture innovators, you should have an open mind, ask questions, and create a feeling of excitement, hospitality, and good fellowship in your laboratory or studio. Think about letting potential innovators under your supervision write their own job descriptions. Be as generous as a John Gettens to newcomers; open your notebooks and records to visitors. Be like the Kecks and invite innovators to speak to your friends and students. Make lists of the unanswered questions as was done at the Fogg, the National Institute for Conservation under Dr. Feller’s leadership, or by the R.A.T.S. group (Research and Technical Studies, AIC Specialty Group). Remind your interns or colleagues what the unsolved problems are; someone may derive great pleasure solving them. Support your innovators with foundation grants and tell foundations about our innovators. Not all of us can be innovators, but we could all be catalysts.

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# PAINTING CONSERVATION IDEAS, ETHICS, MATERIALS, AND TECHNIQUES IN NINETEENTH-CENTURY AMERICA

Kathryn Swerda, Conservator of Paintings

## Introduction

One may wonder about the value of learning conservation history. After all, many past treatment practices are obsolete or even harmful to paintings. If these techniques are no longer used, understanding them may seem without merit. However, many concerns of early- to mid- 19<sup>th</sup>-century American painting restorers are the same concerns as those of modern-day conservators. Though little studied, this period of conservation history abounds with writings describing conservation ideas, ethics, materials, and techniques. Covering a variety of topics and viewpoints, these 19<sup>th</sup>-century sources were written by artists, professional restorers, and writers.

Primarily known to us as painters, John Trumbull, Rembrandt Peale, Charles Willson Peale, William Rickarby Miller, and Thomas Sully also recorded how they restored both their own and other's paintings. In books advertising their services, professional painting restorers, George Howarth and Darius Chase, described practices of the day for the public. In order to broaden knowledge of American artists, the writer and poet Laughton Osborn compiled, translated, and supplemented foreign manuals into a single handbook. What they all wrote in books, journals, and diaries – some published, others unpublished – reveals how paintings that we now care for and study were treated and altered in the past. Their writings are therefore relevant to everyone who treats or studies paintings.

Embracing research, experience, and writing as means to better painting conservation, these early American painting restorers read voraciously, examined constantly, and voiced opinions ardently. While many of their practices have been discarded, several of their ideas and ethics are remarkably modern. Like today's conservators, they disagreed on many subjects, including how far should a painting be inpainted, negative repercussions of using wax, and retention of patina. Discussed in this paper are the several themes running through their writings – environment and preventive measures, treatments with wax, lining, inpainting, grime removal, varnish removal, and patina.

## Environment and Preventive Measures

Like many artists throughout history, John Trumbull was solicitous about the future stability of his paintings after they left his hands. More than one hundred and seventy years ago, when writing to the owner of one of his paintings, Trumbull identified the key environmental concerns in preventive conservation today – light, temperature, humidity, and fluctuation: “keep it free as possible from dust – out of reach of the Sun, or a hot fire, and in a dry and temperate room.”<sup>1</sup> Laughton Osborn warned against “smoke of all kinds, foul and pungent odors, and lastly, though this accident is not the least troublesome, the filth deposited by flies.”<sup>2</sup> Rembrandt Peale had a global perspective on problems with the environment: “Canvas, or Panels which the antients called Tables, at all times important in the consideration of the Artist, is particularly so in America, where the extremes of hot + cold, dryness + moisture, subject them to injuries to which they are less liable in other climates.”<sup>3</sup> Peale thereby anticipated the injury conservators would see when, decades hence, American millionaires would transport paintings over the oceans in bulk.

The writings of Rembrandt Peale's father – artist, naturalist, and inventor Charles Willson Peale – ranged from notes on painting pictures to recipes for preserving birds and to experiments in making bifocals. With such a limber and learned mind, he suggested an unusual treatment intended to simultaneously repair and preserve paintings: lining with tinfoil. “1<sup>st</sup> Separate the canvis from the pannel or straining frame,” he instructed, “+ lay it on a smooth Table, with the painting downward, + nail it securely. 2<sup>nd</sup>, Take a piece of Tin-foil, larger than the canvis and spread it

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evenly on a very smooth table. Then melt some Salisbury glue in the same manner as for cabinet-maker's use. 3rd, Warm the Tin-foil, and lay it again on the Table, then wash it over with the glue, and place it in the back of the Canvis, secured as above, as quickly as possible, smooth it perfectly with the hand, and let it remain in a warm room to dry."<sup>4</sup> Although lining with tinfoil is uncommon today, the Peale's idea of tinfoil as a barrier from the environment is similar to the idea of constructing a Marvelseal® vitrine for a painting today. Charles Willson Peale was not alone in recommending lining to prevent future damage. His son Rembrandt, for example, also saw lining as a preventive measure.<sup>5</sup> But Charles Willson Peale's suggestion to use tinfoil – a suggestion made just at the cusp of the 19<sup>th</sup> century – set him apart from his colleagues.<sup>6</sup>

With as much curiosity and even more fervor than his father, Rembrandt Peale recorded interests ranging from practices of the ancient painters to stability of newly discovered pigments. In his *Notes of the Painting Room*, he acknowledged dozens of concerns about the durability of paintings and proposed many solutions resulting from both his direct observations and his reading. He "noticed that Pictures in frames with Oval Spandels, whilst every portion of the painting has been cracked by the action of the Atmosphere, those parts which were covered at the Corners by the Spandels have been unaffected." He therefore was convinced, like many conservators today, "that Glass over Oil paintings that are thoroughly dry, is a protection to them."<sup>7</sup> After reading that Titian permeated his canvases with wax to resist the damp climate of Venice, Peale not only followed the practices of the old master himself, but also urged all artists to: "It is so important to guard the backs of Canvasses from the influence of moisture, that it is advisable for every Artist to keep at hand a quantity of Wax dissolved in Sp. of Turpentine, for use at any Moment."<sup>8</sup> Although Peale mentioned that shellac or paint served the same purpose, the favorite material of the time was wax.<sup>9</sup>

#### Treatments with wax

Treating a heavily cracked work that he had painted seven years beforehand, Thomas Sully "saturated the back of the canvas with melted bees' wax – the yellow wax – warmed it by the stove until it was soaked into the cloth."<sup>10</sup> Whether describing recipes and techniques or critiquing works, Sully wrote about his contemporaries as often as he did about himself. According to Sully, Trumbull not only used wax to repair older paintings which had cracked, but also to protect new paintings from damp walls."<sup>11</sup> Like Trumbull, some conservators today embrace the process of saturating canvases with wax as a preventive measure. To repair cracks, Charles Willson Peale also recommended brushing the back of the canvas with "melted white wax, and, with a warm flat smoothing Iron, rub over the wax and press it hard."<sup>12</sup> Contrary to the ethics and aesthetics of our day, Peale liked how wax altered paintings. The process of pressing the iron hard, he persuaded, "will draw the colours up to the canvis."<sup>13</sup>

Although wax lining was not discussed in the literature, the prevalence of wax in both preventive and restorative conservation made its continued use and popularity an obvious progression. Osborn was already describing how to patch tears with pieces of canvas dipped in melted wax.<sup>14</sup> Lining took it just one step further. Yet even before wax lining developed, conservators already had reservations about using wax. One of Thomas Sully's "Hints for Paintings," in a journal of the same name, testifies that the issue hotly debated in our own time is not new: "a picture which has wax on the back can not be re-canvassed."<sup>15</sup>

#### Lining

Rembrandt Peale instructed, "paste one or two thicknesses of Tissue paper on the surface of the Picture, to prevent its being injured. This may afterwards be removed with tepid Water. Take the Canvas off its Frame – Cut away the edges – moisten the back with warm Water to soften its sizing – Have ready a strong cloth strained on a Frame with Wedges – On this spread with a broad brush, some well boiled Paste with a little glue or Venice Turpentine in it, and also the back of the old Canvas, and apply it to the new, pressing them well together from the center, to exclude all air, with the palette knife + palm of the hand – And finally press it with a warm (not hot) flat Iron."<sup>16</sup>

Hudson River School artist, William Rickarby Miller described a lining adhesive composed of flour paste and "Flanders glue." To prevent insects from attacking it, he added ox gall or creosote to the paste.<sup>17</sup> Osborn recommended leaving the painting in a damp cellar for several days before lining it, "to render the old canvas and the color softer and more manageable." After this humidification, the painting could be faced with paper and flour

paste and then lined with “a choice new canvas, a well-boiled paste, made of rye flour with a clove of garlic, and a not too hot iron.”<sup>18</sup>

How could these restorers who cut away the edges of paintings have cared about paintings as we do today? When they abandoned paintings in a damp cellar for days, were they oblivious to damages incurred by treatment? Because so many paintings were altered and damaged by our predecessors, answering “no” is tempting. Granted, Rembrandt Peale did not predict what value the hidden parts of paintings would hold for later generations. Yet on other issues he often exhibited both compassion and foresight, as with his previously-mentioned concern about the extremes in weather in America damaging paintings. When suggesting placing a painting in a cellar, Osborn was limited by the tools and methods of his time. Yet he was far from unthinking. Prudence stirred his lament, “even the practised hands, of those who do this work as a regular business, frequently injure what they were employed to preserve.”<sup>19</sup> When considering lining, 19<sup>th</sup>-century Americans could show forbearance. John Neagle recommended patching holes as an alternative to lining.<sup>20</sup> Trumbull opted not to line a painting during treatment: “The cracks which are still observable on the surface of the picture...can only be removed (and that imperfectly) by what is called lining, a operation that is by no means required by the present state of the work.”<sup>21</sup>

### Inpainting

No one specifically mentioned issues of central importance to us when inpainting: reversibility and separation. Yet, as an inpainting medium, both William Rickarby Miller and Rembrandt Peale criticized oil paint – unethical to use today because it is not reversible. Considering oil paint an unsuitable inpainting medium because it stained the painting, Miller chose a mastic and gum-water mixture instead.<sup>22</sup> Complaining that oil paint darkened over time, Rembrandt Peale chose a copal varnish medium for inpainting.<sup>23</sup>

Conceited about his own abilities and disparaging of others’, Rembrandt Peale unabashedly performed treatments that could be considered unethical today: “I have seen Pictures repaired that were rendered better than when originally painted. ...a good artist may submit to be employed to repair a bad picture, which comes from his hands with beauties that were not conceived by the Original Painter; not only in the retouching of forms, painting out defective parts, but with the magic results of toning + glazing. ... I think, in my own experience, I have Several times been similarly successful.”<sup>24</sup>

But a professional restorer had more respect for artists’ intent. George Howarth wrote a book in 1859 entitled, *Restoration of Oil Paintings: with a Few Practical Hints to the Owners of Pictures*. (Skimming on the hints, the book would have been more aptly entitled, *Restoration of Oil Paintings: why the Owners of Pictures Should Employ Me.*) Howarth complained that other painting conservators “daub, either leaving a picture with hideous patches of new paint, or proceeding, step by step, in the vain attempt to secure something like uniformity until they have actually covered up the last square inch of the original handiwork.”<sup>25</sup> In contrast, he did not “paint over an old picture for the purpose of restoring it, unless it be in places where the original paint is gone.”<sup>26</sup> This statement alone – so modern in its tone – makes reading this piece of false advertising pleasurable.

### Grime removal

Rubbing a peeled and sliced “raw ‘Irish Potatoe’” over the surface of a painting removed surface grime in 19<sup>th</sup>-century America.<sup>27</sup> Alternatives were a sponge dipped in ox gall<sup>28</sup> or “chamber lye + white of egg.”<sup>29</sup> Though some household items are still used in conservation, such as gelatin as an adhesive, more modern materials have replaced the potatoes and eggs for grime removal. Howarth guarded his method of grime removal as a trade secret, but he was happy to describe the techniques of his competitors. They preformed, claimed Howarth, a “hydropathic treatment, by which the picture, after being well scrubbed with soap suds, is placed in an inclined position and treated to a showerbath of pure water.”<sup>30</sup> The vision of such a showerbath is enough to make a modern conservator shudder. But Howarth claimed that he did not use such an “injudicious use of water.”<sup>31</sup> Rembrandt Peale, too, cautioned readers to use only “a slight application of moisture.”<sup>32</sup>

## Varnish removal

John Neagle's broad interests included painting techniques, lives of great painters, and color differences in paint swatches after ageing for ten years. His writings were no less detailed as they were broad. When recording solvents to remove varnish with, he nearly exhausted the list of his day: "liquor potassa, oil of tartar, spirits of wine, pure alcohol, liquor Ammonia fortis, Naphtha, ether, soda, and oil of spike."<sup>33</sup> Another option, which, wrote Neagle, "requires much caution," was "an alkaline solution composed of one ounce of potash + 8 ounces of water."<sup>34</sup> "Before the Solvents are applied," Neagle also recommended, "the painting should have received a thin coat of Mastic Varnish + allowed to dry. This will attach itself to the old varnish which is thus the more easily removed."<sup>35</sup>

Sully placed a painting in a "horizontal position and having poured pure alcohol over it keep it moistened in this manner for some minutes without employing friction. If cold water be then applied to the surface, it will remove the alcohol and the portion of resin which had been dissolved or softened. But care must be used not to employ friction for fear of attacking the ground. When the surface is dry, renew the operation till the varnish is removed."<sup>36</sup> The amount of ethanol put into the air during this treatment would be a health and safety concern today. If pure alcohol did not work, wrote Sully, the varnish was therefore an insoluble resin, such as copal. But ether, he wrote, "will dissolve copal without touching the drying oil."<sup>37</sup> Again with ether, Sully did not mention any health or safety concerns. But the expense of ether did concern Sully, and his efforts to slow the evaporation of the expensive solvent also stemmed his exposure: "the loss occasioned by its evaporation may be prevented in some measure by dipping a cloth in ether and applying it to the canvas and pressed down with a plate of glass or metal."<sup>38</sup>

Varnish removal with solvents, complained Rembrandt Peale, "requires great dexterity + Watchfulness, in thus dissolving the Varnish, not to injure the surface of the painting, (which perhaps has been finished with a Varnish glazing), especially by renewed applications of the dissolving fluid." So he removed varnish mechanically by rubbing the painting with thin flakes of glass.<sup>39</sup> Similarly, Osborn described "dry attrition" with fingers and pulverized rosin.<sup>40</sup> But Howarth disparaged varnish removal "by use of strong solvents, or with pumice stone and water, or crumbling it off by dry friction; and this leaves the picture in a damaged condition."<sup>41</sup> He did not describe his varnish-removal system, but he assured his potential clients that he did not use "powerful solvents, or resort to the scraper."<sup>42</sup>

Fearing injury from varnish removal, Rembrandt Peale warned painters that a glaze, "however precious in the eyes of the Painter, or the early owner of the Picture, although it be in a degree protected by Varnish, is liable at some future period, to be washed or ground off by the Picture Cleaner."<sup>43</sup> He urged, therefore, "previous to the glazing, the Painter should prepare his picture by solid painting to be in the best condition for the glazing; and he may then honestly conclude that if the future Picture Cleaner should wash or scour of all these last finishings, he will find the solid painting below, perhaps in as good condition as if the Author had not refined it by glazing, for the greater enjoyment of its first possessor."<sup>44</sup> Neagle expressed his concern more concisely: "For the sake of durability glazing should be sparingly used."<sup>45</sup> One wonders if Peale and Neagle allowed concern for the future stability of their paintings to influence technique in other areas as well. One also wonders if their dual roles as both painters and restorers influenced their views of patina.

## Patina

The history of painting conservation is rife with cleaning controversies and convictions about how aged, or how pristine, a painting should look. 19<sup>th</sup>-century America was no exception. The views of these past painters and restorers are presented here to provide evidence that conservation of paintings has always been the subject of lively discussion and debate.

Blaming professional picture cleaners for the public's love of patina, Rembrandt Peale believed, "Picture Cleaners furnish us with constant evidence that old Pictures are chiefly valued because they are old; + the more so in proportion to their darkness, dirty condition, cracks, + other injuries of time: It is too often their interest to encourage a taste that furnishes them with greater employment than they would have if their Customers were taught to prefer good modern paintings, clean + fresh from the Painter's Easel."<sup>46</sup> If the public opted for dark paintings over "clean + fresh" ones, did they therefore prefer light, partial cleaning over total varnish removal? Certainly not according to sources left by professional picture cleaners.

Never did Darius Chase, a New Jersey restorer, mention patina. Instead his 1858 treatise on restoration advertised what he thought his clients wanted – paintings that regain their “pristine Beauty” and “original freshness.” The paintings Chase treated were “made to assume that that beauty and harmony as when they left the pencil of the artist.”<sup>47</sup>

In an appendix of his book *Restoration of Oil Paintings*, Howarth published letters of recommendation from his clients. His clients never mentioned patina. Rather, they praised Howarth’s cleaning that “brought out the colors of the great master in all their original freshness,” restored paintings “to their pristine freshness” and that brought back “the original style and coloring of the author.”<sup>48</sup> However, to Howarth, himself, patina was important. Although he also wrote that paintings he treated reveal “the original colors appear in all their purity, as fresh as when the artist laid them on,” Howarth also emphasized that these paintings show the effects of time by having “that softness which all paintings acquire by age.”<sup>49</sup>

Both the most favorable view and the most cynical view of patina resided in Osborn’s handbook. “As for the embrowning of the varnish,” he claimed, “there are even cases where it is rather an advantage.”<sup>50</sup> But he also skeptically termed patina as the “supposed effects of time on the surface of pictures, an appearance, whether of varnish or crust, that is known to be quite as often fabrication as the green mold on the little bronzes, which are manufactured by wholesale for the especial benefit of travelers in Italy.”<sup>51</sup> As today, different views on patina clearly co-existed.

## Conclusion

In his extensive and insightful (if also opinionated) *Notes of the Painting Room*, Rembrandt Peale affirmed, “The discoveries + improvements in Art and Science have always been progressive. The mind of Man, so capable of vast acquirements, is only expanded through successive acquisitions, slowly, from time to time; the discoveries of one man, or one age, being transmitted to another, serve as a foundation of improvements, + further developments of knowledge.”<sup>52</sup> Faith in progress moved Peale and his contemporaries to look at the writing of their forerunners and to record their own observations for future generations. Improvement for the future condition of paintings, they believed, depended on their work. It would have satisfied them to know that people in the 21<sup>st</sup> century look back to their work as such a “foundation of improvements.”

## Acknowledgements

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<sup>1</sup> Trumbull, J., Letter to Mrs. Custis, New York, 1<sup>st</sup> of May 1830. NB: In this quotation and all subsequent excerpts from 19<sup>th</sup>-century sources, all underlining, spelling, capitalization, and symbols have been retained just as they were written by author.

<sup>2</sup> Osborn, L., 295. Although the book is by nature a compilation of foreign sources, Osborn did not translate directly, and he supplemented much of the information. Leslie Carlyle points this out in *The Artist's Assistant: Oil Painting Manuals and Handbooks in Britain 1800-1900 With Reference to Selected Eighteenth-century Sources.* London: Archetype Publications, 2001, 318.

<sup>3</sup> Peale, Rembrandt., 15.

<sup>4</sup> Peale, C. W., pages not numbered. (Frame number 240 on microfilm reel).

<sup>5</sup> Peale, R., 18.

<sup>6</sup> Charles Willson Peale's *Memo Book* is dated 1793. Tinfoil lining was more common by the mid-19<sup>th</sup> century in both America and London; see Stoner, et. al., "A Portrait by C. W. Peale restored by C. Volkmar; Techniques of an 18<sup>th</sup>-century artist and a 19<sup>th</sup>-century Restorer," Preprints of Papers Presented at the Seventh Annual Meeting of the AIC, Toronto, Canada, 30 May – 1 June, 1979. Washington, D. C.: American Institute for Conservation of Historic and Artistic Works, pp. 139-148.

<sup>7</sup> Peale, R., 123.

<sup>8</sup> Peale, R., 124.

<sup>9</sup> Peale, R., 167.

<sup>10</sup> Sully, Thomas. *Hints for Pictures.* November 21, 1836 entry

<sup>11</sup> Sully, T. *Hints for Pictures*, August 11, 1829 entry and *Memorandum Book*, 43.

<sup>12</sup> Peale, C. W., pages not numbered. (Frame number 240 on microfilm reel).

<sup>13</sup> Peale, C. W., pages not numbered. (Frame number 240 on microfilm reel).

<sup>14</sup> Osborn, 292.

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- <sup>15</sup> Sully, T. *Hints for Pictures.*, August 11, 1829 entry.  
<sup>16</sup> Peale, R., 122.  
<sup>17</sup> Miller, William Rickarby., 264.  
<sup>18</sup> Osborn, L., 292-294.  
<sup>19</sup> Osborn, L., 294.  
<sup>20</sup> Neagle, John. *Commonplace Book*, 48.  
<sup>21</sup> Trumbull, John., 2.  
<sup>22</sup> Miller, W. R., 264.  
<sup>23</sup> Peale, R., 44.  
<sup>24</sup> Peale, R., 174.  
<sup>25</sup> Howarth, G., 6.  
<sup>26</sup> Howarth, G., 14.  
<sup>27</sup> Sully, Thomas. *Memorandum Book*, 19.  
<sup>28</sup> Neagle, John. *Receipts*, pages not numbered.  
<sup>29</sup> Neagle, J. *Commonplace Book*, 27.  
<sup>30</sup> Howarth, G., 5.  
<sup>31</sup> Howarth, G., 6.  
<sup>32</sup> Peale, R., 167 and 63.  
<sup>33</sup> Neagle, J. *Commonplace Book*, 48.  
<sup>34</sup> Neagle, J. *Receipts*, pages not numbered.  
<sup>35</sup> Neagle, J., 48.  
<sup>36</sup> Sully, T., *Hints for Pictures*, entry not dated .  
<sup>37</sup> Sully, T., *Hints for Pictures*, entry not dated .  
<sup>38</sup> Sully, T., *Hints for Pictures*, entry not dated .  
<sup>39</sup> Peale, R., 113.  
<sup>40</sup> Osborn, L., 288.  
<sup>41</sup> Howarth, G., 6.  
<sup>42</sup> Howarth, G., 8.  
<sup>43</sup> Peale, R., 41.  
<sup>44</sup> Peale, R., 181.  
<sup>45</sup> Neagle, J. *Receipts*, 5.  
<sup>46</sup> Peale, R., 183.  
<sup>47</sup> Chase, D., 19.  
<sup>48</sup> Howarth, G., 14-16.  
<sup>49</sup> Howarth, G., 8.  
<sup>50</sup> Osborn, L., 288.  
<sup>51</sup> Osborn, L., 380.  
<sup>52</sup> Peale, R., 83-84.

## CHARACTERIZATION AND EVALUATION OF FADING BEHAVIOR FOR FLUORESCENT COLORANTS

Sandra A. Connors, Assistant Conservation Scientist; Hannah R. Morris, Deputy Director and Paul M. Whitmore, Director

From the Pop Art movement of the 1960's to the present, artists have used fluorescent colorants to create vibrantly colored works of art. Unfortunately, these colorants have caused preservation and conservation problems for many museum professionals, due to poor lightfastness and difficulty with color matching. In order to gain a better understanding of this behavior, experiments were performed on 12 fluorescent samples from Dr. Ph. Martin's® Radiant Concentrated Water Color line of products. The colorants studied range in hue from pink and red to yellow and green. Samples were exposed to three high correlated color temperature light sources (high output daylight fluorescent lamps, xenon lamp, and natural lighting, achieved by exposing the samples to light through a north facing window). Two different lighting conditions were used for each light source, either with or without ultraviolet (UV) light. UV-absorbing Plexiglas (UF3) sheets were used to filter out the UV light when necessary. Results from these experiments were used to assess the appearance change of fluorescent colorants when illuminated with and without UV light, the fading of fluorescent colorants with and without UV light, and the difficulties and possible solutions for color matching of fluorescent colorants. The effect on appearance and fading of fluorescent colorants from "mixed" light sources (i.e. high correlated color temperature source and ultraviolet "black" light source combined) are not within the scope of this study, but is an area for future research.

It is widely believed that UV light must be included in the light source when exhibiting works of art containing fluorescent colorants in order to achieve their full brilliance. To test this theory, reflectance measurements were made with and without UV light included in the illuminating light source and were compared. The results showed no change in appearance for 4 of the samples tested and only showed 1-8% change in total reflectance for the other 8 samples tested. This is a small change in total reflectance and is not likely to result in a significant appearance change if UV light were removed from the illuminating light source. Therefore, these colorants are not likely to lose their brilliant appearance when UV light is removed.

UV light is usually excluded from exhibition light sources in an attempt to slow the fading rate of colored materials on exhibit. In order to determine how removal of UV light would affect the fading rate of fluorescent colorants, the fading rates of samples exposed to UV and visible light were compared to the fading rates of samples exposed to visible light alone. The results for this study were mixed. Four of the samples showed no difference in fading rate when UV light was removed, while four others showed only a slight reduction in fading rate (between 1.2 and 1.5 times slower). The final four samples, however, showed a more significant reduction in fading rate (between 2.0 – 2.8 times slower). It is worth noting that all of the samples showing a reduction in fading rate were pink in hue. Although not beneficial to all samples, the removal of UV light from exhibition lighting conditions is likely to reduce the fading rates for pink fluorescent colorants.

Many conservators have experienced difficulty inpainting areas of loss on fluorescent works of art. Some describe problems in matching the bright fluorescent appearance of a color using non-fluorescent materials, while others have found an unexpected change in the fluorescent colorant's hue upon aging, making a repair more visible than it was when originally conserved. To address this problem, dilutions of the original fluorescent colorant were prepared to match the colorant at different stages of fading. This was successful for most of the samples tested. Ten of the samples showed a good match in both fluorescence and hue shift, which was monitored by its position on a chromaticity chart, through all stages of colorant fading. Two samples, however, showed a good match at the early stages of fading but diverged when matching later stages of colorant fading with lighter dilutions of the original material. This result occurred in samples which contained multiple fluorophors with different light sensitivities. Very light sensitive components of the mixture were lost rapidly while more stable components of the mixture remained through later stages of fading. This results in a hue shift that could not be matched easily with the original fluorescent colorant. With these two exceptions, color matching of the fluorescent colorants studied with dilutions of the original material was successful.

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Research Center on the Materials of the Artist and Conservator, Carnegie Mellon University, 700 Technology Drive, Suite 3325, Pittsburgh, PA 15219

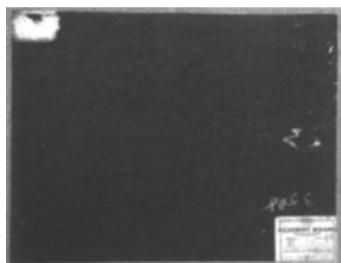
## MARSDEN HARTLEY'S MATERIALS AND WORKING METHODS

Ulrich Birkmaier, Conservator  
Stephen Kornhauser, Chief Conservator

Hartley wrote little about his painting materials, except to complain occasionally of the “difficulties of new canvas” or the fact that he didn’t have “material or frame”. The contents of his last studio in Corea, Maine, were left to Bates College, Lewiston, Maine. These, and the examination of a large number of his works, helped in the reconstruction of Hartley’s studio practices.

Throughout his career, Hartley painted on a variety of supports, and used a variety of materials for reasons of economy, preference and availability. Trained in an academic tradition in Cleveland and New York, his early mostly square-formatted American pictures, painted in or after 1906 are on fabric supports. He continued to use canvas while in Europe just before the outbreak of WW1. Suppliers’ stamps on the reverse of the original stretchers show that the supports were purchased in both Germany and France. When Hartley returned to Europe in 1921 for a second extended stay, he resumed painting on linen. Although he would occasionally paint on canvas again over the course of his career he was dissatisfied with what was available or with what he could afford in the United States as he noted, “so many difficulties new to me – canvas that ate me out of house and home, ruined my brushes...its chief distinction being strength and that always appeals but there is no canvas this side of Belgium and Paris that has strength plus intriguing surfaces.”

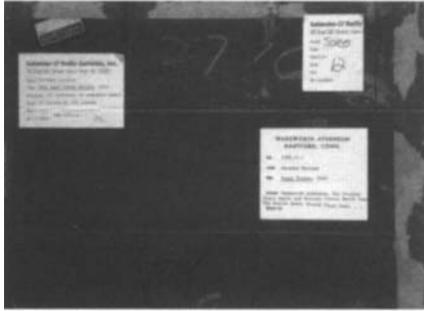
Back in America, he chose instead to paint on a variety of rigid supports. One type was academy board, a thin paperboard that was commercially primed, usually with a lead and chalk mixture. Many of his works are on prepared boards manufactured by the W. Weber Co.<sup>1</sup> The boards were sold in standard sizes and most of Hartley’s paintings on this specific support were sized either 18 x 24 inches or 22 x 28 inches (fig.1). The boards were durable enough to take his forceful brush strokes, easy to transport, and less than a quarter of the price of a comparably sized canvas, even though today we find that some of his paintings on academy board unfortunately have rather severe flaking problems.



**Figure 1** Weber Academy Board, reverse of *Cleophas, Master of the “Gilda Grey”*, Walker Art Center, Minneapolis, Minnesota.

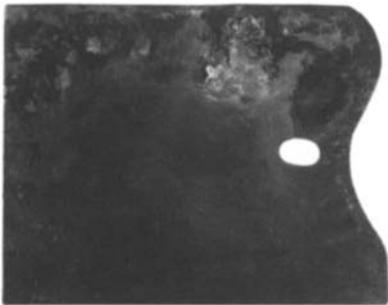
In 1917, when Hartley was in Provincetown and Bermuda working on his ‘Movement’ series, he painted on both a wallboard and composite board with a core of wooden slats and a pulp paper glued to each side. Because of the war, supplies of artist materials were difficult to find. Hartley wrote the New York framer, George F. Of, asking him to send him “twenty-four composition boards of the same dimensions”.<sup>2</sup> The series was eventually painted on two standard formats, 20 x 16 inches and 24 x 20 inches.

Most of Hartley’s late works painted after 1939 are on a Masonite®-type hardboard, tempered boards that had been commercially scored on the reverse with a 4inch tile-like grid pattern, as seen in the Wadsworth’s *Down East Young Blades* (fig.2). Many of his paintings from this period were a standard 30x40inches. The larger format was something Hartley felt strongly about: “...my thirty by forty is really swell for me, the rest is miniature”.<sup>3</sup> Hardboard was fairly common, easily procured, and relatively inexpensive.



**Figure 2** Scored Masonite®-type hardboard, reverse of *Down East Young Blades*, 1940, Wadsworth Atheneum, Hartford, Connecticut.

In 1914, when Hartley was in Germany he wrote to mentor and dealer Alfred Stieglitz requesting artist materials, and while in Bermuda during the winter of 1917, he sent a shopping list of tube colors to his friend Abraham Walkowitz. The contents of Hartley's studio in Corea, Maine, where he painted the final three years of his life, included some of his paints: two glass vials, tube oil colors and an artist's palette. The vials, one a cadmium yellow pale, and the other cadmium yellow light, were manufactured in Germany and presumably bought there. There were eighteen tubes in an "Artist's Thrift Pack" manufactured by Bocour and two tubes of the lesser grade, Bellini oil colors. Hartley's palette was left with fresh oil colors, matching those on his final painting *Roses*, Walker Art Center, Minneapolis, found still on the easel a day after his death in 1943 (fig.3). Paint samples from this palette as well as from three paintings at the Wadsworth Atheneum, *Military* painted in 1913, *Movement #2* done in 1917, and *Down East Young Blades* of 1940, were taken and examined, using SEM-EDX. The white paint used in *Military* was a traditional white lead, while the white used in the later *Movement #2*, *Down East Young Blades* and *Roses* was zinc white. The red pigment in his German work was a traditional vermilion while he used cadmium red for his later works.



**Figure 3** Hartley's palette, 1943, Bates College Museum of Art, Lewiston, Maine.

A color pad with elaborate color exercises, annotations, and writings on drawing and proportions meticulously done by Hartley was also found among his belongings, and gave invaluable insight into the color theories he based his painting on (fig.4).

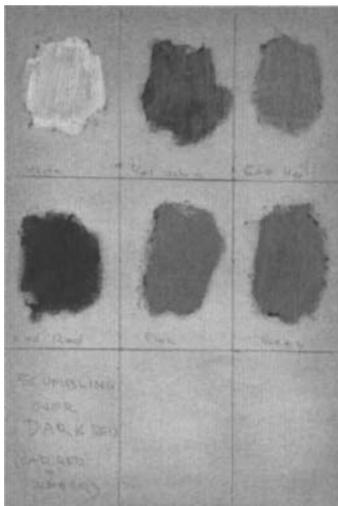
Hartley's studies at the Cleveland School of Art, and at the National Academy of Design, New York City, provided a traditional art education, which is reflected in the relatively conventional working methods he used through the mid thirties. After 1934 there was a shift away from traditional materials and methods toward the use of different painting supports combined with a much more direct and fast paint application. Stylistically and technically these works marked a departure from everything Hartley had done previously.

The first step in Hartley's working method was to absorb a place visually and mentally. Hartley considered this the most important phase in the creative process, and he insisted that before he could paint a scene, he needed to process the images mentally, capturing the essence of a location.<sup>4</sup> Preliminary drawings played an important role in this process throughout his career, and Hartley would sometimes make several sketches at a particular site. Despite borrowing stylistically from impressionism and neo-impressionism in his early years, Hartley was never a "plein-air

painter". Once the mental absorption of a place was achieved and preliminary drawings were executed, the actual paintings would be realized in Hartley's studio, often weeks later. This is demonstrated in a letter dating from December 1933, sent by Hartley to his niece from Garmisch-Partenkirchen, Germany, in which he is talking about a painting on cardboard, now in a private collection:

'...and I want some more material for subject matter, though I can't do anything outside but make the drawings and then do the rest in my room, which I have done for years, and I don't miss much of the actual facts, even as when I was in Mexico, I absorbed it so well that the one in the Cleveland Museum I did in Berlin and if New Mexico were not so hard to get at and into, I should like to try it again, for I have heard a number of times that I was the only one that ever did get that country, much as years ago I was the one who got Maine and that is the way I get anything, by just getting into it all over...' In the same letter he wrote: 'I am even painting on cardboard because I can't afford canvas, but I like cardboard.'

Hartley was a prolific draughtsman, which is reflected in the large amount of surviving drawings. With few exceptions nearly all the works on paper are directly related to paintings later realized in oil. These drawings not only served as a link from Hartley's initial conception of a scene to the finished work in oil, but they also provide insight into the resolution of compositional problems. The materials used in these drawings include pencil, silverpoint, crayon, and charcoal on a variety of colored papers: white, yellow, green, gray, pink, wine colored, or black. Hartley's careful choice of different-colored paper for drawings and his notes on drawing, underpainting and imprimatura<sup>5</sup> in his 'color exercise pad' illustrate his keen awareness of the impact that different materials and colored grounds would have on a composition.



**Figure 4** One page from Hartley's 'exercise pad', date unknown. Bates College Museum of Art, Lewiston, Maine.

After these initial sketches, Hartley often started the painting process with a drawing on the painting support, which could later be covered by paint, but frequently remained visible, becoming an integral part of the finished painting. Some of his early Berlin canvases demonstrate how the meticulous drawing and subsequent sparse application of paint gave the work an unfinished appearance.

The Dogtown paintings illustrate how the separate steps of drawing and painting could be merged into one. The majority of the Dogtown paintings were done on 18 by 24 inch pre-primed academy boards. Hartley worked out the composition by blocking in shapes with a few, quickly drawn lines. Color annotations within these shapes served as reminders for the placement and choice of colors in the finished painting. These color indicators became particularly important as much time could pass between the initial drawing and the actual painting, realized later in the studio.

Underdrawing remained important during the last years in Maine. Many of the large format works on hardboard show an abbreviated working method, as the paint application became faster and was realized directly onto the unprimed painting support, although Hartley did not skip the crucial step of underdrawing. He usually used what has

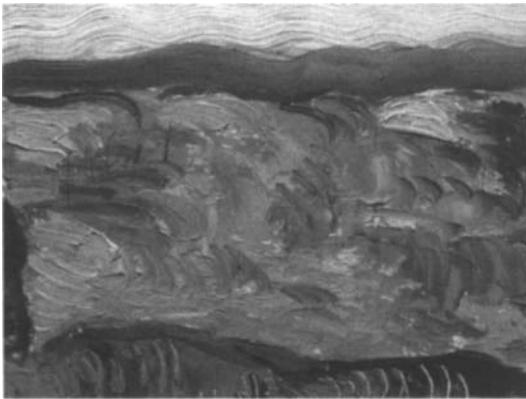
the appearance of a thick, waxy, black crayon<sup>6</sup> to outline shapes in a quick and generic manner. In the late years the sole purpose of underdrawing was to indicate shapes<sup>7</sup>, whereas the underdrawing in the Dogtown paintings served the double role of laying out the composition and to indicate color selection and placement for subsequent paint application.

Paint application followed the stylistic influences in the early landscapes, from Impressionism to Giovanni Segantini, whose paintings Hartley studied carefully: short brush strokes formed small dabs of multiple colors that created a busy surface with high impasto. A dark, somber mood appears throughout many of the early paintings, reaching a highpoint in the paintings that Hartley made in homage to Albert Pinkham Ryder. The painting supports are almost entirely covered with paint, but in some areas a dark layer of underpaint becomes visible. Hartley achieved this characteristic Ryder-style by layering only a couple of paint films, whereas Ryder's paintings often consisted of multiple layers of paint. Stieglitz, who owned these paintings among many others by Hartley, made a dismissive comment to Hudson Walker in 1943: *These paintings wouldn't exist without Ryder, and whereas Ryder worked so deeply into his paintings, Hartley only got a surface quality.* Hartley used a wide range of colors for these works, usually in a wet-in-wet application.

The works Hartley painted during his first extended stay in Europe show a greatly reduced palette, consisting mainly of red, green, white, blue, and yellow, reminiscent of that of the Blaue Reiter group, in particular that of Wassily Kandinsky and Franz Marc.

Individual colors were thinly applied, mostly unmixed, except for additions of white to give the painting a higher key. Very little or no additional oil was used to render the paint liquid, which resulted in a dry, powdery surface. The primed canvas became an integral part of the painting, showing through the surface over large areas.

Starting in November 1914, Hartley created the group of paintings that is today often perceived as an artistic highpoint in his career, the series of War Motif paintings. The overall key, colors, and shapes are similar to the earlier Berlin paintings, but they have an unusual appearance, due to the black 'ground' that is juxtaposed with the bright and colorful shapes. This black imprimatura was applied over the entire paint surface, and the subsequent extremely thin paint application allowed for the underlying black to show through, giving each color depth and saturation. Upon his return to the United States the works contrasted strongly with the Berlin canvases: In the Dogtown series the paint application became generous again, reminiscent of his early impressionistic paintings. Hartley applied paint forcefully and very quickly, and shifted his palette to match the colors found in nature, such as ochre, browns, and other earth colors. The surface quality of the paint films also changed dramatically, due to the artist's use of the palette knife to modify the paint surface, and due to his scoring the fresh paint with the back of his brush (fig.5).



**Figure 5** Detail of *Dogtown*, 1934, Frederick R. Weisman Art Museum, University of Minnesota, Minneapolis, illustrating Hartley's use of the palette knife, and scoring into the wet paint film with the back of the brush. Hartley's drawn color indication *gold!* can be seen in the upper left quadrant of the image.

During the last years in Maine, the size of the painting supports shifted toward larger formats of Masonite®-type board, frequently used in the construction business. After sealing the slick surface of the tempered hardboard with shellac, Hartley would indicate the composition with a quick, generic drawing using black crayon.

The paint application itself became very direct, fast and secure, reduced to a minimum necessary.<sup>8</sup> To achieve this new, faster technique, Hartley began to employ larger brushes of uneven quality, as is evident in the amount of brush hair embedded in the paint film of many of the late paintings. A number of surviving paintings that have never received any conservation treatment appear unvarnished, while paintings that have a surface coating are documented as having been varnished later. The photographer Paul Strand described in a letter to Alfred Stieglitz the Hartley painting *El Santo*, which he had seen in 1926 as having "...that dry paint quality which he [Hartley] alone has which creates a new fine tactility -paint and not yet paint....".

The group of paintings from Hartley's first Berlin stay, the War Motif series in particular, stands out not only stylistically, but also for the subtle beauty of their surfaces. The commercially pre-primed canvases were highly absorbent, and the thin paint application created a matt surface with subtle variations with more or less gloss, depending on the medium content of each individual pigment and its application. The overall effect is that of an ever-changing appearance in the surface texture of the painting, depending on the light, and the angle of observation. The variety of surface textures creates great depth, which is lost when the paintings are uniformly varnished, which appears to affect the black colors in particular. The painting *'Himmel, 1914-15*, at the Nelson Atkins Museum, Kansas City is one of the recent conservation success stories: It had a thick varnish that was recently removed, giving the painting back its depth and subtle surface. Other varnish removals, like one performed by Jay Krueger at the National Gallery, have yielded similar results. Our examination of over 100 paintings suggested that Hartley never varnished a single painting, although another material employed by Hartley affected the gloss and general appearance: numerous paintings show a peculiar, strong yellowish-green fluorescence under ultraviolet illumination. Unlike a fluorescing uniform layer of an aged natural resin, which would suggest a varnish application, this material was found to consist of a mixture of drying oil with a copal resin.

Hartley applied this resin in a painterly fashion selectively in some areas of the painting. Most of the time it was applied separately, unmixed, but in one case the resin was found to be mixed with small amounts of black paint. Examination of Hartley's palette under ultraviolet illumination confirmed the presence of the same resinous material found in a number of paintings. It suggests that the medium could also be added on the palette to individual pigments or pigment mixtures, as found on *Down East Young Blades*, at the Wadsworth. In the painting of a *Duck* at the MFA, Boston, the glaze was generously applied throughout the paint surface, with a particular focus on the dark background. This oil-resin glaze appears relatively solid, and it was shown that varnish removals could be safely executed without affecting it (fig.6).



**Figure 6** *Black Duck, 1940-41*, Museum of Fine Arts, Boston. Ultraviolet illumination reveals the presence of a resinous glaze, applied generously and deliberately throughout the paint surface, with emphasis on the background.

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<sup>1</sup> F. Weber Co., Philadelphia, Pennsylvania.

<sup>2</sup> McCausland

<sup>3</sup> McCausland Letter from Hartley to Hudson Walker, February 8, 1940.

<sup>4</sup> 'In Hartley's Studio', by Gail R. Scott.

<sup>5</sup> A colored glaze, size, or wash applied on top of a white ground to provide the initial tone for the design layer.

<sup>6</sup> The waxy crayon was an obvious choice, as it was one of the few materials that would adhere to the smooth Masonite®-type support sealed with shellac.

<sup>7</sup> Once the composition was indicated by the preparatory drawing, Hartley rarely changed it in the painting process. Pentimenti are rare even in the late Maine paintings, where the underdrawing process was abbreviated.

<sup>8</sup> Between 1939 and 1943 the 'new and fast' painting technique resulted in a very large number of paintings accomplished, and Hartley often worked on numerous paintings at the same time.

**"If a painting is worth doing at all, it is worth doing well":  
Frederic Taubes and the Advocacy of Craft in Mid-Twentieth Century American Painting**  
Elise Effmann, Andrew W. Mellon Fellow in Paintings Conservation

In January 1943, *American Artist* magazine devoted its feature article to Frederic Taubes.<sup>1</sup> Steadily building a reputation both for the rich color and sensual brushwork of his paintings as well as his expansive knowledge of his craft, the painter was a natural choice for a magazine dedicated to the practical side of the arts, as they put it "the how and the why" of the creative process.<sup>2</sup> Photographed in his studio preparing a varnish, a mortar and pestle, jars of pigments, and bottles of other ingredients in the background, the article praised him for his efforts in the modern revival of sound craftsmanship. A recognized authority on the practice of painting since the publication of his first book, *The Technique of Oil Painting*, two years earlier, Taubes advocated a solid understanding of materials and a technique grounded in the principles established by the Old Masters as essential to successful artistic endeavor. The article ended with the announcement that "Taubes' Page" would be inaugurated the following month, in which the artist would discuss matters of interest to painters and answer reader's questions. Although the column was initially only to run through the end of 1943, it endured for nearly nineteen years giving Taubes a monthly voice during a period of vast transformation in the art world in America.

Taubes was born in Lvov, Austria in 1900.<sup>3</sup> He displayed an avid interest in art as a child and a precocious talent for drawing. His developing passion was enhanced when the World War forced his family to move to Vienna. There, he was exposed to the galleries of the Academy and the Imperial Museum where he studied the Old Masters and Greek sculptures at the expense, however, of his academic studies. After the failure of his high school exams ended his father's hope of a financial career for his son, Taubes enrolled in the Academy of Art in Munich in 1918. His skills were honed in the tradition of the European academies by drawing from the live model and antique casts and studying the Old Masters.

However, it was his courses with Max Doerner that were to pique his interest in the materials and process of his art and were to have the most lasting impact on his later career. Doerner wished to instill in his students a respect for sound craftsmanship by educating them about both the properties of painting materials, as well as the history of painting technique. His lectures addressed both of these issues and focused on the information gleaned from early treatises and his close observation of paintings. Frederic Taubes' interests in materials, historical literature, and first-hand analysis of paintings that is evident in his later writings were developed in this environment. Although he later grew to disagree with some of the details of particular technical processes taught by Doerner, his former professor's belief that "Craftsmanship must again be made the solid foundation of art" was to guide Taubes both as an artist and later as a teacher in his own right.<sup>4</sup>

Despite satisfying his fascination with the technical side of his art in Munich under Doerner, Taubes began to feel restricted by the academic nature of his training. He had become enchanted by the avant-garde scene in both Vienna and Germany and had been experimenting on his own with Cubism and other modern styles. After a year at the Academy, he left to enroll in the newly established Bauhaus in Weimar in 1920. Only open for a year, the Bauhaus must have seemed a logical choice to Taubes, due to its initial emphasis on the fusion of art with craft and design, as well as on workshop-style training as a modern alternative to academic instruction. Taubes later pointed to Johannes Itten as the most influential figure in his studies there. Responsible for teaching the preliminary course, Itten instilled in his students a thorough understanding of materials and a foundation in the principles of form while striving to liberate their creativity. He used a variety of teaching methods from naturalistic drawing, to collage of found objects, to the analysis of works by the Old Masters.

Restless again, Taubes left the Bauhaus after only a year. Throughout the 1920's, he traveled extensively and continued to paint, experimenting with Expressionism and Surrealism. After visiting America in 1930, he decided to move here with his wife and son and became a citizen in 1933. When he arrived, the nationalism in this country that grew out of the isolationist political policies established at the end of the First World War was cresting. Artists and critics increasingly viewed representational depictions of the American landscape and its inhabitants as more original, creative, and truly American in spirit than abstract compositions indebted to European modernism.

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The Philadelphia Museum of Art, Benjamin Franklin Parkway, Philadelphia, PA 19101

Touted as an American Renaissance, the American Scene movement encompassing Regionalism and Social and Urban Realism, certainly spoke to the Depression-era country in a way that the European avant-garde could not.

In addition to these trends and less discussed in current literature, other painters benefited from the critically and governmentally promoted representational style of the time. Not interested in reforming America or documenting the native land and activities of its people, many of these artists chose traditional subjects like portraits, still life, and landscape. Some, like Eugene Speicher, trained at the Arts Students League and with such influential teachers as William Merritt Chase and Robert Henri. Others, like Bernard Karfiol and Walt Kuhn, returned to representational painting after experimenting for years with the avant-garde while in living in Europe.

Frederic Taubes was immediately and profoundly influenced by the art world he found upon his arrival in America in the early 1930's. His work progressively moved toward greater naturalism, motivated by what he described as his desire to "slough off" his European past.<sup>5</sup> In his early 30's himself, this shift is understandable in light of the market demand for representational paintings, and it also correlated with his continued interest in traditional painting techniques. Residing in New York City, Taubes' career ascended rapidly with almost yearly gallery shows and portrait commissions. He was soon represented by Alan Gruskin at Midtown Galleries and later by Associated American Artists Gallery.

Taubes' interest in teaching and his passion for the materials and craft of painting grew into his first book *The Technique of Oil Painting: a discussion of traditional oil technique for use by the contemporary painter*, published in 1941. With clear, concise chapters on all stages of the process, from the choice of canvas to the preparation of varnish, Taubes sought to contribute to the extant literature on the subject by the book's sheer ease of use. Up until this time, Max Doerner's book, *The Materials of the Artist and Their Use in Painting*, translated into English seven years earlier, was the most popular text among artists who were starved for information on painting technique. Doerner's book, based on the same lectures that Taubes would have listened to at the Academy, contained several hundred pages of extensive entries on the history and properties of materials, in addition to their proper use. He also addressed the related topics of tempera, mural, and watercolor painting, and devoted special sections to the techniques of the Old Masters and the restoration of pictures. By comparison, Taubes' book would seem to be a welcome studio companion. In fewer than a hundred pages, it concisely explained basic recipes, procedures, and materials to aid the actual practice of oil painting.

With a sentiment echoing Doerner's imperative that sound craftsmanship must again become the basis of art, Taubes stated in his introduction that "Knowledge, logic and responsibility comprise the 'secret'" of sound technique.<sup>6</sup> He noted that with the decline of apprenticeship training of the medieval and renaissance workshop came a loss of the intrinsic understanding of the painter's craft. This deficiency was compounded by the modern manufacture of artist's materials that further removed the control the painter had over his artistic process. Taubes' ten "General Rules of a Permanent Technique" established the simple, rational tone of the book from the outset. These included such axioms as "1. Employ reliable and tested materials...2. Build the painting upon a white ground...4. Underpaint with a leaner; overpaint with a fatter painting medium...7. Do not coat the canvas in many layers... (and) 10. Do not rely too much on your own findings or clever innovations. Employ the time-honored recipes."<sup>7</sup>

The book was popular enough to be in its fourth printing two years after publication. It was endorsed by such artists as George Grosz and Isabel Bishop, who praised Taubes for writing a simple and much-needed guide based on his own experience. Peppino Mangravite, head of the Art Department at Cooper Union summed up the book's appeal by stating: "I find that your book not only contains the necessary information for an intelligent approach to the technical preparation of the art of painting, but that it is most clearly and intelligibly presented. In fact the whole procedure is so logical that it seems almost incredible that such a book is not already in existence. For the sake of the thousands who need the information you offer I am glad you wrote it."<sup>8</sup>

Taubes encouraged his readers to strive for permanence in their painting, while staying true to the expressive needs of the present. The first chapter describes the preparation the canvas by hand, sizing it with glue and then coating it first with a gesso-type ground and then by a lead white oil ground. This two-layer ground, as with many other recommendations, came directly from Doerner's teachings. Taubes stressed the importance of the next stage, the underpainting, stating that "...it influences the top stratum to a great extent; it is its backbone. It will make the painting last or initiate its decay. It will give it luminosity or opacity. It will make itself felt through the last coat of paint, the more so as the painting becomes older."<sup>9</sup> Taubes advised an alla prima technique to finish the painting to

achieve "greater permanence, textural beauty, and spontaneity of treatment."<sup>10</sup> Transparent glazes to increase the depth and tone of the painting could be added in the final stage of the process.

Throughout the handbook, reference is repeatedly made to the work of the Old Masters and the soundness of their technique. Although he perpetuated Doerner's recipe of a medium containing linseed oil, dammar, and turpentine in his first book, Taubes was uncomfortable about this advice. He recognized that the remarkable state of preservation of many early paintings ruled out the possible incorporation of soft resins as components because they would significantly increase the sensitivity of the paint film in later cleanings. Versed in both early painting treatises as well as nineteenth- and twentieth-century writings on painting techniques, he became intrigued by the possibility of the incorporation hard resins into an oil medium. It had been theorized by Sir Charles Eastlake in the nineteenth-century that copal or amber was an essential component of the medium of the Old Masters.<sup>11</sup> In the twentieth century, the chemists A.H. Church and A. P. Laurie separately recommended hard resins mixed with oil as durable painting mediums for artists.<sup>12</sup> However, due to the difficulty of dissolving hard resins in solvents as well as the common view that they resulted in a dark and brittle paint film, they were uncommon in general artistic practice. While Carnegie Visiting Professor and resident artist at the University of Illinois at Urbana from 1941-42, Taubes involved chemists at the school in the formulation of a copal and linseed oil medium.

He incorporated his research into his second book on technique, *Studio Secrets*, published in 1943. This book sought to supplement his earlier one with a more in-depth discussion of studio practice and provided information on topics such as grinding colors and making frames. *Studio Secrets*, like its predecessor, found a ready audience of artists desirous of technical information. It was endorsed by Thomas Hart Benton, who enthusiastically said in advertisements for the book, "I am at anytime willing to say publicly that I have received much aid and stimulation from your writings" and that it "is indispensable to the serious student of painting."<sup>13</sup>

In this book, Taubes noted that there are different varieties of copal and an important factor in the production of a good-quality medium is the use of a light colored Congo copal. To make it usable as a medium, it must be thermally processed or "run" for it to dissolve in solvents. The preparation Taubes outlined certainly seems daunting enough to deter all but the most curious artists. Briefly described, the process involved the heating of one pound of resin at a time on a gas burner to 600-650° F for 1 – 1 1/2 hours and had the disagreeable byproduct of an acrid smoke. In 1946, "Taubes Copal Mediums and Varnishes" manufactured by Permanent Pigments became available to the average, less adventurous artist. The company, which later became Liquitex, had been marketing a line of Taubes Painting Mediums and Varnishes since 1943. These products were presumably widely used by both professional and amateur artists who read his books and saw the advertisements printed monthly in *American Artist* magazine just pages away from his column. Salvador Dali even wrote in his *50 Secrets of Magic Craftsmanship* of 1948 that he followed Taubes' recommendations for his imprimatura consisting of copal varnish diluted in turpentine.<sup>14</sup>

Although Taubes published almost forty books on art technique as well as criticism and aesthetics, it was his eighteen-year association with *American Artist* magazine that was to give him his most powerful and consistent voice. Inaugurated in February 1943, "The Taubes Page" featured a monthly essay on an art subject of his choosing and a small section devoted to reader's questions on a wide-range of topics. The page was immediately popular with readers who wanted a place to find answers to technical and even philosophical issues. The questions on technique betray the common lack of practical knowledge possessed by the modern-day artist, eager and hopeful for answers on the most basic topics. On the third anniversary of his column, he announced his "boredom" with the sheer number of letters asking whether turpentine can be used as a medium and how to prime a panel.<sup>15</sup>

The monthly essay was the true focus of the Taubes Page and it increasingly became such a forum for his strong opinions about the contemporary art world that he wrote supplementary articles devoted to technique. His essays took on an impassioned tone reflective of the enormous shifts that were occurring during his tenure at the magazine. Once touted as the American Renaissance sure to bring the country's art into the international realm, by the mid-1940's American Scene painting and representational painting as a whole was increasingly criticized as trivial, academic, and out-of-step with the nation's new-found political and economic supremacy in the aftermath of World War II. The arrival of many avant-garde artists, like Josef Albers, Piet Mondrian, and Roberto Matta, who fled Europe in the 1930's reconnected a new generation of artists with the roots of European modernism and further invigorated the growing movement. The ultimate triumph of American painting that pushed the country's art into the international realm came not with a return to sound craftsmanship as predicted by Taubes, but with the rise of Abstract Expressionism.

Artists like Taubes were suddenly faced with an artistic climate in which critics could proclaim that representational painting is "unredeemable" and "serves no social function at all".<sup>16</sup> Clement Greenberg, defining his argument for the supremacy of abstraction, wrote that art of true merit, also known as high art or the avant-garde, could not easily be enjoyed by the masses- precisely the audience for whom Taubes and other artists of his era painted.<sup>17</sup> The new brand of abstraction created a decisive stylistic and theoretical schism with the art of the 1930's. The new rhetoric reached such a level that H.W. Janson, of the ubiquitous college textbook fame, wrote an article for the *Magazine of Art* enumerating the similarities between Regionalism and the officially approved art of the Nazis as well as its parallels with Communism.<sup>18</sup>

The great shifts that were occurring in American art as it rose in international recognition were mirrored in the art magazines at the time. In 1942, *Art News* modified its format from an art trade newspaper to what they called a "journal of ideas" with more stress on the contemporary art scene. *Art in America* had a complete makeover in 1954, drastically shifting its focus from topics like colonial portraiture and nineteenth century landscape painting to the format that we are familiar with today. *American Artist* magazine, which once stood solidly in the mainstream of American art featuring such artists as Reginald Marsh, Georgia O'Keefe, and Andrew Wyeth, found itself increasingly on the periphery of the contemporary art scene. Its staunch support of representational art, amateur artists, and its dedication to sound traditional technique marginalized its influence in an artistic environment that valued new reactions to the post-war status of the nation and unconventional uses of media for their expressive and innovative possibilities. However, despite its decline in stature in the art world, it was *American Artist* magazine that boasted the largest circulation of any art periodical in the world throughout the 1950's.

Supported by the editors of the magazine, Taubes used his monthly voice to champion the cause of representational art and to encourage his readers to look to the tradition of the old masters to judge the quality of contemporary painting and not to the writings of the modernist critics. The new modernism was even more difficult for Taubes to take, not only because it usurped the position of representational art as the voice of American painting and turned those artists out of favor with the critics, but because it essentially rejected his teachings on technique as well as on the education of the artist. Whereas skill and training are viewed as an essential to achievement in practically all other professions, Taubes saw that knowledge of craft was more often than not seen as compromising the artist's creativity and individuality. As Taubes bitterly wrote in 1959, "The avant-garde chap is a happy fellow! without talent, without even the slightest mastery of the art of drawing or painting, without training and knowledge of any kind, he is at liberty to make smears, scratches, or scrawls solely according to the dictates of his inner voices, or according to his 'emotional impulses' or other impulses of as yet undisclosed origin, or to play with barren geometric designs, or simply to demonstrate with convincing pride and aplomb his utter ineptness."<sup>19</sup> Taubes' great consolation was that paintings carefully constructed in traditional techniques would outlast the work of artists who experimented with materials like housepaint and kerosene and whose art will "disappear into the abysmal nothingness from whence it has arisen."<sup>20</sup>

Taubes' association with *American Artist* ended abruptly in 1961 after a falling out with the publishers for his refusal to curb editorializing in the column. He was replaced by Ralph Mayer. Taubes' advocacy of sound craftsmanship in an age fascinated with both new materials and ideological approaches toward painting did not have widespread success or a lasting impact. A logical build-up of paint based on time-tested recipes of the Old Masters was irrelevant in an art world that embraced dripped paint and stained canvases as the true voice of the era. Although his later works emphasized flatness of pictorial space and the simplification of forms in an attempt to stay modern, his shows were less well-received as the years passed. One critic attacked his paintings as "a slick, skill-full blend of pseudo-romanticism, pseudo old master application of paint surface and shallow allegories... (painted with) a swashbuckling brush."<sup>21</sup> Ad Reinhardt depicted Taubes among the artists such as Grant Wood and Norman Rockwell who create paintings in which "no demand is made on you" in his cartoon "How to Look at Modern Art in America" printed in a New York newspaper in 1946.<sup>22</sup> Even his most notable contribution to materials, Taubes Copal Varnish, went out of production in the early 1980's, due to the poor quality of available resin.

Once popular enough to be included in the American Artist Group series of illustrated monographs that includes many still-familiar names such as John Sloan, Stuart Davis, and Raphael Soyer, Taubes is now largely forgotten except to those who frequent bookshelves on technique in used bookstores. As interest in his paintings dwindled, Taubes grew to rely on teaching, and the sale of his books, mediums, varnishes, and later, even brushes for his income. However, his importance as an advocate for sound craftsmanship in the mid-twentieth century, should not

be underestimated. First mirroring the concerns of the pre-War art world, his voice grew to reflect the frustration felt by a generation of artists when the tide turned back toward abstraction. Taubes in some ways can have the last laugh. I visited his grandson's house in preparation for this talk and that is where most of the slides of his work come from. I looked at many of his paintings, and although there is some cracking in the lead white ground, the paintings are in excellent condition.

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<sup>1</sup> Ernest Watson, "Taubes," *American Artist* 7, no. 1 (January 1943): 14-20.

<sup>2</sup> Watson-Guption Art Books, advertisement, *American Artist* (November 1948): 26.

<sup>3</sup> For Taubes' biography see: *An Appreciation of the Work of Frederic Taubes*, ed. Peyton Boswell, Jr. (New York: Art Digest Monographs, 1939), 50-51. *Frederic Taubes*, (New York: American Artists Group, Inc., 1946), n.p.. Diane Casella Hines, "Frederic Taubes: A Retrospective," *American Artist* 38, no. 7 (July 1974) 30-5, 65-6. "Frederic Taubes, 1900-1981," *American Artist* 45, no. 470 (September 1981): 8. Roger Green, *Taubes*, exh. cat.: The Butler Institute of American Art (1983).

<sup>4</sup> Max Doerner, *The Materials of the Artist and Their Use in Painting*, (orig. English version, 1934; revised ed., New York: Harcourt, Brace & Co., 1984) vi.

<sup>5</sup> Taubes, "Meditation of the Tenth Anniversary," *American Artist* 17, no. 3 (March 1953): 56.

<sup>6</sup> Taubes, *The Technique of Oil Painting* (New York: Dodd, Mead & Co., 1941) xiii.

<sup>7</sup> *ibid.*, xvii.

<sup>8</sup> For excerpts from artists' letters used in the promotion of the book (as well as plenty of other interesting and entertaining correspondence) see: Midtown Galleries Records, 1904-1997 (Washington D.C: Archives of American Art, Smithsonian Institution) R 5429, F 796.

<sup>9</sup> Taubes, *The Technique of Oil Painting* (1941) 48.

<sup>10</sup> *ibid.*, 62.

<sup>11</sup> Charles Eastlake, *Materials for a History of Oil Painting* (London: 1847, 1869; reprint ed., vol. I, New York: Dover 1960) 269-319.

<sup>12</sup> A.H. Church, *The Chemistry of Paints and Pigments*, 3<sup>rd</sup> ed. (London: Seeley and Co., Ltd., 1901) 99-121. A.P. Laurie, *The Material of the Painter's Craft* (Edinburgh: Neill and Co., Inc. 1910) 288-290, 304, 367.

<sup>13</sup> *American Artist* 8, no. 5 (May 1944): 7 and *American Artist* 7, no. 9 (November 1943): 35, respectively.

<sup>14</sup> Salvador Dali, *50 Secrets of Magic Craftsmanship* (orig. ed. New York: Dial Press, 1948; New York: Dover 1992) 154.

<sup>15</sup> Taubes, "Pro Domo," *American Artist* 10, no. 2 (February 1946): 30.

<sup>16</sup> Clement Greenberg, "A Symposium: The State of American Art," *Magazine of Art* 42, no. 3 (March 1949): 92; and Adolf Gottlieb quoted in John L. Ward, *American Realist Painting: 1940-80* (Ann Arbor: UMI Research Press, 1989) 51.

<sup>17</sup> Clement Greenberg, "Avant-Garde and Kitch," *Art and Culture: Critical Essays* (Boston: Beacon Hill Press, 1961) 3-21. This essay was first published in 1939.

<sup>18</sup> H.W. Janson, "A Symposium: The State of American Art," *The Magazine of Art* 42, no. 3 (March 1949): 96. It is interesting to note that Regionalism is not included in Janson's famous textbook, *The History of Art*.

<sup>19</sup> Taubes, "The Easy Way Out and the Nature Painter's Tribulations," *American Artist* 23, no. 7 (September 1959): 54.

<sup>20</sup> Taubes, "Juliette May Fraser: Mural Painter of Hawaii" *American Artist* 22, no. 7 (September 1958): 68.

<sup>21</sup> A.L. Chanin, "Frederic Taubes" exhib. review, *Art News* 49, no. 2 (April 1950): 58.

<sup>22</sup> In brief, Reinhardt's cartoon depicts a tree inscribed with the names Braque, Matisse, and Picasso on its thick trunk nourished by roots with the names of the Post-Impressionists. The leaves on the healthy branches bear the names of abstract artists including Pollock, Motherwell, and Gorky. A large branch on the right side is in danger of being split off by a weight bearing the words "Subject Matter." Reinhardt warns against artists on this branch because they "somehow think of themselves as being both abstract and pictorial (as if they could be both today)." Some of the artists whose names are on these branches are Hartley, Demuth, and Shahn. On a branch stemming from this larger one and weighed down almost to the ground by "Still Lifes," "Nudes," and "Landscapes," are artists such as Sloan, Bishop, and Kuniyoshi. Under this branch in a cornfield that looks much like a graveyard lies Taubes, among Benton, Curry, Marsh, and Cadmus. See Ad Reinhardt, "How to Look at Modern Art in America," *P.M.* (June 2, 1946) in Erica Doss, *Benton, Pollock, and the Politics of Modernism*, (Chicago: The University of Chicago Press, 1991) 355. Also, see Ad Reinhardt, "How to Look at Modern Art in America: fifteen years later," *Art News* (Summer 1961). Thanks to James Hamm for finding this follow-up cartoon that "updates" the tree. Taubes does not appear in this second version; he has been replaced in the cornfield by John Sloan.

# THE STUDY AND REINSTALLATION OF THE SCHLÄGL ALTARPIECE: A 15<sup>TH</sup> C. PASSION CYCLE RECONSIDERED

Linnaea E. Saunders, Contract Paintings Conservator\*<sup>1</sup>

## Introduction:

The nine paintings that comprise what is now known as the Schlägl Altarpiece<sup>2</sup> are a unique example in the United States of a large grouping of fragments from a 15<sup>th</sup> C. German altarpiece. The Cleveland Museum of Art (CMA) is fortunate to own three-quarters of the original altarpiece and perhaps most importantly, the central image.

During the course of this presentation, I will outline the history of the display of the panels in the CMA from their acquisition in 1951, their conservation history during this period, and the recent work documenting the original panel structure of the altar. This new information determined the original arrangement of the individual scenes, including the placement of the missing scenes. The curatorial department then requested a method of display that would reflect the original form and function of the paintings. It was proposed that the paintings be reintegrated as a framed triptych with the central section supported on a pedestal, with the wings slightly closed. Such an installation required the creation of four panels to take the place of the missing images. In addition, an appropriate frame profile would be chosen. A structural support system was designed that allowed the paintings to be framed keeping the fictive red borders visible.

Throughout the project, the relationship of these paintings to other paintings from this region and period was studied.<sup>3</sup> The knowledge gained from this research not only points to a clearer avenue of research for attribution of the paintings, but suggests a different emphasis of the subject and function of the altarpiece.

## I. Introduction to the Paintings:

The grouping consists of the large central image of the Crucifixion (75.8 cm H x 70.8 cm W) and eight smaller images (ex. 38.4 cm H x 36.7 cm W) depicting scenes from the Passion of Christ. The paintings have remained together since they were brought to the Schlägl Abbey, near Linz, Austria, in the 1870s by an artist named Müller. The nine paintings remained in the Abbey<sup>4</sup> until the late 1930s, at which time they were sold to an art dealer and were acquired by the CMA in 1951. It is not known whether the four missing scenes survived. Further details of the provenance of the original altar are not known, but clearly it comes from the Westphalian region of Germany, in Münster, north of Cologne.

The panels show close stylistic and compositional affinities to both the Meister von Schöppingen and Johann Koerbecke, two artists noted for introducing Netherlandish realism to German painting. The CMA paintings are stylistically most similar to the earliest paintings attributed to Koerbecke, the two wings of the Langenhorster altar (Landesmuseum für Kunst und Kulturgeschichte, Münster), which date to the 1440s. The Cleveland paintings would have taken the form of a triptych, identical in form to the Billerbecke altar by Meister von Schöppingen (Landesmuseum, Münster). Unlike the Billerbecke altar, there is no evidence that the reverse of the CMA panels had been painted; however, any evidence of this could have been lost when structural work was completed or destroyed when the paintings were transferred. Further attribution and dating of the Cleveland paintings and the relationship between Johann Koerbecke and Meister von Schöppingen would require more detailed systematic technical comparison.<sup>5</sup>

## II. History of proposed arrangements and display at the CMA:

The Cleveland paintings were included in the 1952 exhibition, *Westphalian Painters of the Late Gothic, 1440-1490* curated by Paul Pieper. At that time Pieper proposed an arrangement of the paintings that identified the images as part of a Passion and Resurrection Cycle. Pieper suggested the complete left wing was extant and that the Crucifixion had been flanked by the four remaining images. He suggested the entire right wing--including Post-Resurrection scene--had been lost.

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From 1951 when the panels were exhibited in the CMA, the display reflected Pieper's proposal. The four scenes of the left wing are grouped to the left of the Crucifixion and the remaining four scenes were displayed in the same order as Pieper's arrangement, but as a grouping to the right of the Crucifixion. As a single framed unit, the display was balanced, unified and logical. The images are read from the upper scene to the lower scene, working across the triptych. (Figure 1)

In 1964, the scenes to the right of the Crucifixion were rearranged, reflecting the erroneous report that the two scenes of Christ Carrying the Cross had identical panel joins and therefore should be superimposed<sup>6</sup> (Figure 2). The remaining two scenes, The Mocking of Christ and the Lamentation, are placed to the left of these, where space within the modern frame provided. It is this arrangement that the panels were displayed until taken down in the 1990s for restoration.

While working on the 1974 catalogue of Old Master Paintings, Wolfgang Stechow, Curator of Paintings, corresponded with Pieper. At that time Pieper revised his previous suggestion, and incorporated the incorrect placement of the Carrying of the Cross Scenes. The Lamentation is now the first scene in the right wing. The subject of the altarpiece remains the Passion Cycle and with Post-Resurrection Scenes.

### **III. Conservation History:**

When the panels entered the collection, they began exhibiting separation between the ground, canvas and wooden support. Panels from this region and period are constructed slightly differently from 15th C. Netherlandish panel paintings. They tend to be constructed of radial cut oak boards of considerably thickness (2-2.5 cm Th) and the surface is covered with a fabric layer before the calcium carbonate ground is applied.

William Suhr, described the condition of the paintings in a letter dated March 1955<sup>7</sup>:

"The picture begins showing certain changes since its acquisition in 1951. New losses, gesso and paint occur along the edges and over painted joints. More and larger cleavages between panel and canvas have developed and, most disturbing, the paint film begins to raise along the crack edges with small losses at crack junctures. All of this is symptom of the warping of the panel. It is contracting."

Suhr continues:

"The panel should be kept at a location where there are controlled and even hygroscopic conditions. Each panel should be impregnated/permeated and sealed with wax. All loose canvas, gesso and paint should be secured and losses filled in."

Four months later in a letter dated July 1955, Suhr writes:

"All panels of the Schlägl altar are finished... Sometimes I found the most disagreeable separation, mainly that of the thin paint film from the gesso; to make matters worse often a combination of: paint separation from gesso, gesso from canvas or linen, canvas from panel. Well, we did our best—and—that is the best that can be done short of transference."

By October 1957, the cleavage had continued and the decision was taken to transfer all nine panels. Two groups of three scenes were transferred in 1957 and 1964 (Figure 3 & 4).

Clearly Suhr attempted to address the ongoing problem of separation of paint and ground using local consolidation, but ultimately chose to preserve the paint layer. The insecurity of the structure is related to the changes in the environment in which the paintings were displayed. During the 1950s and 60s the relative humidity fluctuated significantly in the galleries on the north side of the Beaux Arts Building (the medieval and French decorative arts galleries). During that period there was also a chronic problem with veneer separating from the 18<sup>th</sup> C. furniture. It was not until the introduction of the Liebert system in 1974 that the environment in these galleries was stabilized.<sup>8</sup> The remaining three images had not yet been transferred. Once housed in a stable environment and consolidated, the panels have remained stable and no longer exhibit separation between canvas and panel or lifting paint and ground.

#### IV. Present Technical Study:

The present technical study was initiated by my concern about the aesthetic impact of the scenes if they were to be reinstalled as they had been most recently (Figure 2). The four scenes to the left of the Crucifixion were clearly correct, both because of the iconographical program and the crack patterns visible in raking light that indicated the original joins. The central image of the Crucifixion was de-emphasized by the grouping of scenes on either side, and the arrangement of scenes to the right of the Crucifixion was troubling. It did not make sense for the two scenes of the Carrying of the Cross to be placed after the Deposition.

To learn more about the iconographic program and original construction of the altarpiece, the subjects of the scenes were studied and the original panel construction was documented. It was clear that the subjects would generally follow a narrative sequence, although inconsistencies in sequence are often observed in similar altarpieces. The physical evidence of the original panel joins would provide further information of the sequence.

The three images that remained on original supports were of particular interests, as through documentation of the join construction illuminating information was revealed. The Blindfolding of Christ, and Christ tied to the Column together represented the full height of the panel. Only a narrow sawcut had been lost when the images were separated through the red fictive borders. Therefore, an accurate drawing of the original join construction could be made. Each of the two vertical joins was secured with three dowels, evenly spaced by 30 cm (Figure 5). The Crowning of Thorns also remained on its original support. In this case, one join was present with only one dowel, 8 cm from the bottom edge (Figure 6). If the join construction remained consistent throughout the altarpiece, then the placement of the dowel in the Crowning of Thorns demonstrates that this image should be placed in the lower register, to the left of the Crucifixion. None of the three remaining scenes could be placed above the Crowning of Thorns because the panel construction did not correspond. Therefore one of the missing scenes was originally in this position.

The panel joins in the three remaining small scenes were each located at different widths indicating that each of these three scenes would have been above or below one of the three missing scenes to the right of the Crucifixion. However, these three scenes have been transferred therefore the position of each scene in an upper or lower register cannot be confirmed by the location of dowels. The subjects of the final three scenes provide the first clue to the arrangement on the right side of the Crucifixion. The overall panel construction of the altarpiece confirms this arrangement.

Previous to this study, the following narrative sequence had been proposed: Christ Carrying the Cross, Christ Falling beneath the Cross and the Lamentation. However, the subject of the scenes is more specific (Figures 7 & 8). To the left side of Christ Falling under the Cross there is a man, dressed in gray, hands clasped and quietly looking at the fallen figure of Christ. This same figure appears in Christ Carrying the Cross but this time he is *helping* to carry the Cross. He can therefore be identified as Simon of Cyrene. Consequently, the sequence of the two scenes should be reversed: Christ Falling beneath the Cross followed by Christ Carrying the Cross, aided by Simon. The Lamentation follows. Because the panel construction demonstrates that each of the three scenes must be in a different vertical field but the transfers have resulted in the loss of the dowel placement, the position of each scene must be determined by the logical sequence of the subjects. Christ Fallen beneath the Cross must be placed in the central section of the altarpiece and is placed in the lower register. It immediately precedes Christ Carrying the Cross, which is placed in the upper left register of the right wing. The Lamentation is placed in the upper right register of the same wing, because it would be unlikely that the altar would end on this subject.

The altarpiece is therefore composed of a central section consisting of five panel members from 24 to 32 cm in width (25.3, 26, 26, 31.5, 24.5 cm W, left to right). The left wing is composed of four panels, widths of 24, 15, 23, 10.5 cm reading from left to right. The right wing was composed of four panel members 19, 18.5, 23, 10 cm W, left to right. (Figure 9). The left and right wings are symmetrical in construction in that both are composed of four panel members, even though the construction could easily be made using three panels of similar width to those found in the central section. The panel construction confirmed the iconographic program of the scenes forming the left wing. It shifted the placement of the mocking of Christ, and the two scenes of Christ Carrying the cross. In addition, it is now clear that the altarpiece focuses on the Passion of Christ rather than the previous suggestions where Post-Resurrection scenes are included.

Given this study of the subjects and evidence of original panel construction, the paintings in the Cleveland Museum of Art form a significant portion of each section of the triptych: The four paintings of the complete left wing, the central Crucifixion and the two flanking scenes in the lower register of the central section, and the two scenes of the upper register of the right wing.

The subjects of the missing scenes may be suggested based on the iconographic program of related altarpieces. In the central section, the Ecce Homo and Carrying of the Cross, perhaps with Veronica, in the upper left and upper right registers respectively. In the right wing, the Nailing to the Cross and the Entombment or Resurrection are probable. The four scene act as a shortened version of the Passion Cycle and one can imagine the person or organization responsible for deconstruction the altar keeping the fragments together.

#### **V. Visual compensation for missing scenes:**

To achieve a structurally and aesthetically coherent altar framework, panel and frame mock-ups were made to find an approach that would indicate the new inserted panels and frame were non-original while remaining sympathetic to the aesthetic impact of the original scenes. It was important that the reconstruction did not become the focus, but that the reconstruction aided in drawing attention to the paintings themselves.

Several panel mock-ups were made utilizing visual clues from the paintings. A more “neutral” approach was explored. One approach utilized untreated oak with a red painted border, however the unfinished oak seemed to light in tone and would change color with oxidation over time. Two different types of stain were applied to the oak supports. The light ochre stain was close in tone but different in hue to the abraded gold background. The dark brown stain was intended to imitate the oxidized surface of aged oak however the dark color drew the eye away from the paintings. With both of the stained panels, the pigment of the stain picked up the wood grain and rather than create a neutral surface, emphasized the abstract wood figure and joins. A fourth approach drew upon knowledge of the original materials and construction of the paintings. The gilded and toned panel, outlined with the fictive red border succeeded in creating a similar hue and tone to the background of each scene. The red border aids in recessing the flat surface and provides a visual link to the original panels. While this solution unifies the ensemble, it would not be mistaken as an original fragment. The solution is also sympathetic as it indicates the original materials and techniques employed. This aspect could be used as a teaching tool in a special focus exhibition.

The panels were constructed of radial cut oak boards similar in thickness to the originals. Each of the joins corresponds to the placement of the joins in the original panels positioned above or below the new elements. To maintain a clean edge the canvas layer was omitted and several layers of calcium carbonate in glue size were applied. Two layers of yellow bole and one layer of red bole achieved a medium warm tone similar to that of the original bole. Gilding was applied in fragments to stagger the joins. The position of the red painted border was marked with a scribe and a base-tone laid in using pigment ground in linseed oil. Toning of the entire surface including the red border was executed using very dilute coats of Ronan Superfine Japan Colors<sup>9</sup> applied with a Japanese brush and partially removed using a second dry Japanese brush, thus minimizing abrasion of the gilding. This toning method was successful in dulling and darkening the surface, and giving it a slightly matte finish. The fictive details of the red borders were painted using Gamblin Restoration Colors.<sup>10</sup>

#### **VI. Choice of Framing:**

Many of the frames on paintings from this period are non-original and reflect later 15<sup>th</sup> C. Flemish frame profiles. For instance, the frame that surrounds the Koerbecke’s Langenhorster wings is modern, with mitered corners and a flat painted surface.

Two frame profiles taken from historical frames were considered. The profile from the Blankenberch Altar by the Meister des Frondenberg, dates from 1400. The broad profile of the Meister des Frondenberg altar is often used at the Landesmuseum Münster, most recently for the framing of a panel of a later 15<sup>th</sup> C. artist, Dirk Baeggert. When a

mockup was made for the Schlägl panels it was clearly too broad and plain and even in a reduced width, overwhelms the Schlägl panels.

Given the Schlägl paintings show a demonstrable influence of Meister Von Schöppingen, the original frame profile from the Billerbecke altar was recreated. original frame is relatively narrow with a restored polychromy of gold, green and blue paint defining the molding elements of the inner edge, and a flat wide red band that is decorated with gilded flowers and silver leaf.

The profile was proportionally scaled down to suit the smaller Schlägl altarpiece. Each element of the frame was fabricated from a single thickness of oak stock. The original square mortise and tenon corner construction was copied from the original. The molding profile was hand-planed and the corners were hand-carved.<sup>11</sup> The frame was painted using as a reference the colors of the Billerbecke frame but relating the blue and green to those found in the Schlägl paintings.<sup>12</sup> The gilded flowers and silver leaf motifs were omitted. (Figure 10)

## **VII. Conclusion:**

The physical history of this altarpiece has resulted in changes that have altered the visual impact of the images and knowledge of its historical and religious function. The altarpiece has been dismantled and partially dispersed. Past attempts at consolidation of paint and ground were not successful in mitigating the recurring losses, and the paint layer was transferred to new supports. During past attempts to understand the subject and function of the altarpiece, knowledge of the subjects in images of related altarpieces had suggested the narrative sequence. During the present study, the narrative sequence has been determined by the information inherent in the object and the images themselves. Understanding of the original construction of the altarpiece clarified the iconographic program.

The decision to recreate the original form of the altarpiece and therefore indicate the original function of the paintings was made with careful consideration. The primary concern was to encourage the viewer to study and appreciate the individual images, while indicating these images were part of a larger context and story. And it is studying the images again that we begin to understand the larger context of the altar. There are an unusual number of scenes focusing on the suffering of Christ. Two scenes represent Christ carrying the Cross and it is proposed that one of the lost images depicted a third scene from this sequence. In each of the scenes Christ is depicted without a halo, in sharp contrast to the Virgin Mary and Apostles, each represented with a gilded halo. This was a conscious decision on the part of the artist, who chose not to complete the halos indicated with incised lines above Christ in the first two scenes of the altar. The artist therefore chose to emphasize the humanity of Christ.

## **Acknowledgements:**

I would like to thank the Kress Foundation for supporting a Kress Conservation Fellowship, 2001-2002 and Katherine Reid, the Director of the Cleveland Museum of Art for her encouragement and continued support of this project during the second year. Stanton Thomas, formerly Assistance Curator in Charge of Paintings before 1600 and Stephen Fliegel, Curator of Medieval Art. In the Conservation Department, Bruce Christman, Chief Conservator; Marcia Steele, Conservator of Paintings; Kenneth Be', Associate Conservator of Paintings. Jim George, Chief Preparator for his enlightening discussions, assistance and attention to detail. Joan Neubecker and Janet Burke for the Photography of the project. Gerald Smith, Carpenter. Chris Bauer, Cabinetmaker/Architect, The Joint Workshop, for developing design and construction of the frame. Melvin Rose, Rose Ironworks, for supplying the patinated hinges. Dean Yoder, Yoder Conservation, for advice on preparation of gilded panels. Ingeborge Eugenia Deutsch, Conservator of Old Master paintings and Hermann Arnhold, Curator, at the Landesmuseum in Münster.

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<sup>1</sup> This project began when I was studying original panel construction of 15<sup>th</sup> C. paintings on wooden supports, as a Kress Conservation Fellow, 2001-2002. I documented the panel construction and other technical details. Kenneth Be', Associate Conservator had treated the paintings, 1995-2001.

<sup>2</sup> Master of the Schlägl Altarpiece, Passion of Christ, Westphalia, active 1440-1450, Cleveland Museum of Art, 1951.453, Mr. and Mrs. William A. Marlett Fund, 1951.

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<sup>3</sup> Courier and research trips to Germany provided opportunities to study related paintings and approaches to displaying similar fragments. The survey of approaches to displaying fragments in German institutions is too lengthy for the current article. Approaches included individually framing fragments and arranging these on the wall, placing fragments in a triptych format with “neutral” linen covered boards in place of missing scenes, and creating architectural structures that support panels in original sequence but emphasize that the altarpiece has been cut into fragments.

<sup>4</sup> Wolfgang Stechow, *European Paintings before 1500, Catalogue of Paintings, Part I*, Cleveland Museum of Art, 1974, pp.31-33.

<sup>5</sup> The author bases this assertion on close observation of both the Cleveland paintings and a number of paintings in Münster. However, the paintings in Münster have not undergone systematic technical examination.

<sup>6</sup> The identification of the join in these two images was reported during the transfer of three of the images. It is possible that information was transcribed incorrectly. Current examination clearly indicates the joins of these two images do not correspond.

<sup>7</sup> All quotations are drawn from documents in the curatorial and conservation files for this object.

<sup>8</sup> Personal communication with Bruce Christman, Chief Conservator, The Cleveland Museum of Art.

<sup>9</sup> Ronan Superfine Japan Colors, T.J. Ronan Paint Corp, 749 E. 135 St., Bronx, NY 10454.

<sup>10</sup> Gamblin Restoration Colors, Gamblin Artists Colors Co, P.O. Box 625, Portland Oregon 97207; Tel: 503-235-1945; [gamblin@gamblincolors.com](mailto:gamblin@gamblincolors.com).

<sup>11</sup> The frame was made from solid oak stock by Chris Bauer, Cabinetmaker/Architect, The Joint Workshop, Cleveland OH. Chris refined the initial design of the frame and structural system and utilized handtools for the molding profiler. Patinated hinges were made for the project at Rose Ironworks, Cleveland OH, under the guidance of Melvin Rose.

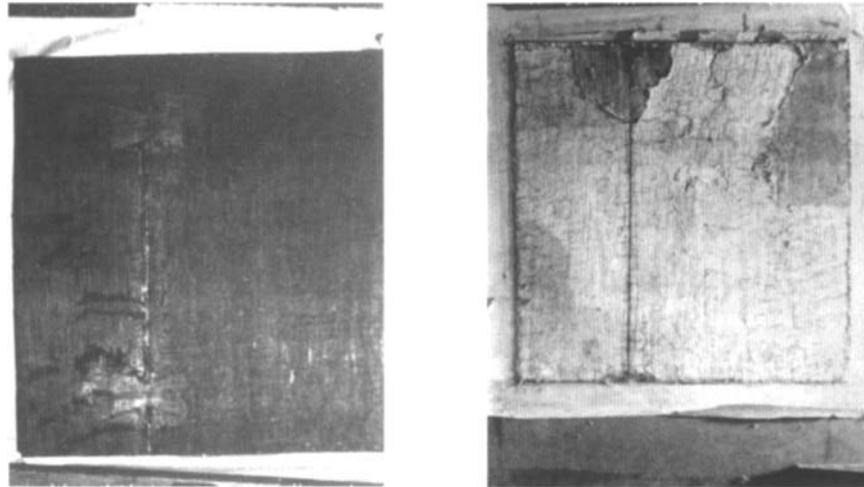
<sup>12</sup> The frame was painted by James George, CMA Chief Preparator, using Ronan Superfine Japan Colors.



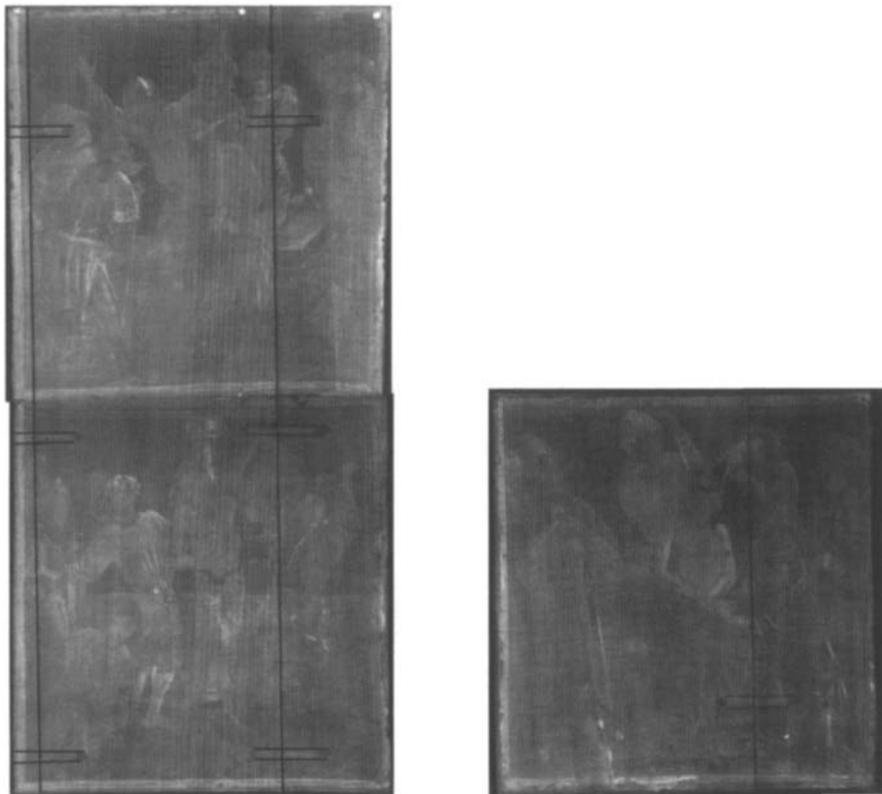
Figure 1: display of Schlägl Altarpiece from 1951 to 1964. Note unified framing and narrative sequence of images.



Figure 2: display of Schlägl altarpiece from 1964 to 1995. Note the rearrangement of images to the right of the Crucifixion. The two scenes of the Carrying of the Cross are to the right of the Lamentation and are not in correct narrative sequence.



Figures 3 &4: The reverse of the Agony in the Garden before and during transfer. On the right, note that the panel had been removed and the canvas is partially removed revealing the ground preparation.



Figures 5 & 6: X-radiographs of the Blindfolding of Christ and Christ tied to the Column (on the left) showing full height of panel with two identical join constructions. X-radiograph of the Crowning of Thorns (on the right) showing one join with dowel indicating placement of image in lower register.



Figures 7 & 8: Christ falling beneath the Cross (left) with Christ Carrying the Cross, aided by Simon of Cyrene (right), are shown in the proper narrative sequence.



Figure 9: The entire altarpiece with joins indicated. Note four panels were used to construct each of the wings and five panels were used to construct the central section.



Figure 10: The final installation with gilded panels in place of missing scenes and frame profile based on historical frames.

## THE HISTORY OF CONSERVATION AT THE UNION LEAGUE CLUB OF CHICAGO

Elyse Klein, Paintings Conservator

The Union League Club of Chicago is a private, non-profit city club that was founded in 1879 by many of the same individuals who sat on the boards of Chicago's eminent cultural organizations, such as The Art Institute of Chicago, the Newberry Library and the Symphony Orchestra (fig. 1). It is a vestige of the lunching and supper clubs popularized in American cities in the late 19<sup>th</sup> century and related to but independent of the older established Union League Clubs of Philadelphia and New York. The Club was founded as a place where Chicagoans could gather to lay the groundwork for civic projects, organize social and philanthropic undertakings, and engage in enjoyable conversation and camaraderie. Its influential membership has been a catalyst for nonpartisan action in the government, political, economic and social arenas - lending leadership and resources on important issues such as school finance reform, historic preservation, and advocacy for a moratorium on the death penalty.

Uncommon among private, social clubs, is the Union League of Chicago's extensive art collection. Of museum quality and size, the Club's art collection is none-the-less housed in a non-museum environment. In addition to the history of the collection and conservation at the Club, this paper will discuss the challenges and unique circumstances that the Club atmosphere sets up for preservation.

Presently, the art collection of the Union League Club contains more than 750 works, including paintings, sculpture, works on paper and decorative arts. One of its prize possessions is a Monet purchased in 1895, *Apple Trees in Blossom*. Begun in the 1890's, the collection has grown over the decades through acquisitions that were primarily purchased with a percentage of members' dues. Initially, art was acquired as decoration for the Clubhouse and for the members' enjoyment. In the nineteen-teens the collecting mission became geographically focused. Today, the Club's art holdings, which focus on art from the Midwest, are regarded as one of the most important private collections in the region. On average several pieces enter the Club each year, though there have been times, such as the years of World War I and II, when purchases were deferred.

The collection is the Club's second largest financial asset, outranked only by the real estate the Clubhouse occupies. Artwork is on display throughout the 24-story building with very little of the collection remaining in storage. The Clubhouse is comprised of modern guestrooms and suites, two ballrooms, numerous conference rooms, an 18,000-volume library, an athletic department with a swimming pool, formal and casual dining rooms and lounges. Located in the heart of Chicago's financial, judicial, and federal office district, the Club attracts members from the business and professional mix of the neighborhood. The Club began admitting women members in 1987. The Club is funded primarily through its catering functions and hotel operations with dues covering a portion of operating expenses. There are over 3,737 members and current monthly dues are \$187. Of that % goes towards the acquisition of art.

By the early 1900's, the Club's leaders recognized that the art collection required maintenance and special care. A passage from the 1910 annual report highlights the Club's foresight in conservation, stating that, "Paintings and other works of art need continual supervision and care that their value as something to be enjoyed and their worth in the picture market may not be impaired by neglect of repairs." By the end of that year the Club had spent over \$4,400 on reframing and refurbishing the art.

Restorers were contracted from the Art Institute of Chicago, local art dealers such as the department store, Marshall Fields, and the local frame shop, Newcomb Macklin, on an as need basis. Unsolicited treatment proposals occasionally came from restorers who had visited the Club as guests. Sadly, one such proposal, advising that relining paintings to a rigid backing would "...bring back the value of the art and extend its lifetime," was accepted and many of the Club's valued pieces were maraflogged at that time. Among these was the Club's Innes, *Picnic in the Woods*.

The preservation needs of the collection grew proportionate to its size and in 1970 a task force was established to determine whether a part-time curator/cataloger/conservator should be employed. A decade later the Club's first curator was hired to fill all three roles. After a rapid succession of several curators, the first to stay for an extended tenure hired an assistant who specialized in treating works on paper. The assistant also dabbled in painting

restoration and documented cleaning several paintings with Ivory Snow detergent. Large-scale projects continued to be farmed out to local conservators, but the needs of the collection remained undiminished.

The art department's level of professionalism significantly improved when the Club's current curator, Marianne Richter, arrived in 1995. Her museum background reshaped the Club's art registration, loan policies, display, and preservation. She contracted a paintings conservator to condition survey the entire collection and prioritize paintings for treatment.

Not surprisingly, the survey highlighted the enormous preservation needs of the collection. For every painting needing treatment, three estimates had to be quoted and some conservators required the paintings to be shipped to their studio for examination prior to supplying a bid. Quality assurance with the lowest bid method of selection was uncertain and the unnecessary transit of art frustrating. It was the cost and complications of contracting outside conservators that led management and the art committee to discuss the creation of an in-house conservation position.

The acknowledgment of the art collection as the Club's second largest asset served the cause for its preservation well. The Club's general manager, curator, and art committee chair made the case for an in-house conservator to the board, laid out in simplest terms as asset management. They pointed out that sixteen engineers were employed to repair and upkeep the Clubhouse building, and not one staff member was responsible for the preservation of the art. Likewise, the annual budget contained monies for refurbishing carpets and wallpaper, but no line item for the conservation of paintings. According to the chair of the art committee at that time, it was only a moderately difficult sell to gain support of the board. Because of the way in which the need for a staff conservator was advocated, funding for conservation comes from the Club's budget for maintenance and repairs.

Locating a vacant site in the Clubhouse to set up a studio posed a greater challenge. None of the available spaces were larger than a storage closet or provided sufficient natural light. The Club's first in-house conservator, Cynthia Kuniej-Berry was given one such room outfit with a ventilation trunk, an easel and a worktable. It was 12 floors above the curator's office, creating an obstacle for communication. Sunlight appeared a little more than an hour in the morning, before being eclipsed by surrounding skyscrapers. Even with these constraints during her year at the Club, Ms. Berry established high standards for conservation.

The in-house studio had been up for less than two years when the space became needed for a renovation to the women's locker room and spa. As Ms. Berry's successor, I worked with the curator to secure the Club's commitment and investment of \$100,000 in the construction of a new lab space. The current studio is adjacent to the curator's office and art storage and is for an institution of this magnitude, 'state of the art.' In addition to ventilation, basic tools and supplies, it is equipped with a microscope and suction table and has a custom-installed window drilled through 2 feet of brick and concrete, that provides adequate natural light. Art storage was renovated during the 2000 studio construction and moved to a new climate-controlled room built on the parapet outside the old art office windows.

The potential dangers of a Club atmosphere are what distinguish conservation at the Union League from most other collecting institutions. These dangers include: smoking, eating, drinking, quick room turnovers and crowded set-ups for banquets and business meetings, large groups of people, drunk people, and unsupervised viewing, flowers and elaborate decorations for weddings and other catered functions (fig. 2). Special events the Club hosts that highlight hazards to the art include a spectacular theme party called Homecoming, with decorations that one year ranged from a helium-filled 'hot air balloon' to a Japanese footbridge over an actual pond filled with coi. Boxing Night, is an annual evening of live boxing matches and cigar smoking held in the Club's Main Dining room where some of the Club's most valuable art is on display; the petting zoo at Easter is complete with live baby goats, geese, and rabbits. Further problems are presented by the environmental limitations of the Club's 1920's building. The role of conservation and challenge for the conservator is to keep the artwork accessible to the members while protecting it from the hazards that abound.

Much of the preservation work at the Club involves devising solutions for exhibiting art in the less than ideal conditions. We glaze paintings in vulnerable locations, like the restaurants, bars and smoking lounges, with non-reflective glass or Plexi and raise the hanging height of works in these areas to prevent unintentional bumps from visitors or catering busmen involved in speedy room turnovers. We relocate sensitive materials to safer

environments; four Audubon prints were moved from the Club bar, one of the smokiest rooms in the building, into storage and replaced with photographic reproductions of Club memorabilia. We attach backings to all paintings and change display hardware from screw eye and wire to d-ring and hooks. We use security screws on works in unsupervised viewing areas, and mount security cameras and alarms on the more valuable pieces.

The physical limitations of the 1926 Clubhouse building present equal challenges for achieving preservation goals. Power supply, voltage restrictions and decorative architectural elements like the plaster ceilings of the Club's main stairwell, limit lighting options to picture frame lamps in several areas of the Club. In these locations old fluorescent lamps were replaced with low watt tungsten-halogen lights. The old lamps were purchased in 1950, and, when we replaced them in 1999, scorch marks were visible on the backs of several canvases from overheated transformers. Where the architecture permits, we install spotlights, by clamping lamps to chandelier arms for temporary exhibitions and mounting track for permanent display. For the collaborative work Primondo, a duratrans and kodolith computer generated image mounted in a plexi light box, we placed the light on motion detector to limit exposure and fading. The solutions to lighting are simple but prior to specifying a schedule, picture lamps were left on 24 hours 7 days a week even when all other room lights were turned off.

The historic building's limitations, also hinders maintenance of appropriate environmental conditions. Monitoring with a sling psychrometer shows that while temperature remains fairly constant at 70-72 degrees, humidity can fluctuate from 20 to 75%RH depending on the season and busyness of the Club. There is little to do to regulate the RH in the large open rooms with high ceilings but move sensitive works to a different location and close air vents near existing art.

Policy changes that impinge on the member's rights, such as bans on smoking or eating near the art or those that limit their access to the collection, are hard to implement, as are costly measures that benefit only the value of the art, such as 24 hour climate control. We have learned that making a connection to another aspect of the Club or appealing to business savvy helps to champion the cause for change. Installing new picture frame lamps in the stairwells was largely accomplished by dovetailing them with a project to replace the wall sconces in that area. Turning the picture lamps off overnight was succeeded by appeals to "energy reduction."

Some of the small-scale policies that we have been able to enact to help minimize damage include restricting the movement of art unless initiated by the art department. This may seem minor, but, in the past, art was moved often, especially for holiday decorations or large parties, and by whomever had a free hand. We trained the building engineers and head housemen to act as art handlers. We establish guidelines with the catering department for food and beverage set-ups so that chafing dishes and live plants and flowers are set back from the art.

Staff now has a better understanding of the importance of the art collection and its value. Housekeeping notice changes in the condition of works of art during their shifts and reports damages immediately. Education played a key role in gaining staff respect and making the basic needs of the collection understood. Informing staff of the value of the art and liability issues helped to encourage the newfound caution needed around the art.

The first few years of establishing a conservation program in an institution that has never had one can be trying and difficult. Management and staff may not know what to expect or, far worse, have unrealistic expectations. There may be resistance to policy changes and apprehension of budgets spiraling out of control. At the Union League Club, support grew immeasurably after the studio was up and running and the effect of treatments could be seen. One of the smartest things the general manager did was to invite me to speak to each committee to share some of the treatments I had undertaken and discuss my goals for conservation at the Club. For many, it was a first exposure to conservation and issues of preservation and the presentations left all members impressed with their decision to care for the collection.

Many colleagues in museums and perhaps some in private practice may wonder how or why one would work in an institution where preservation issues often rank second to other Club functions. This work situation is not for everyone, but those who enter a non-museum environment may be pleasantly surprised to find that recognition and appreciation for conservation is high and in some instances greater than where it is more routine. Probably my greatest challenge is the constant need to change the way in which the Union League Club perceives their art collection, from something to be used, and fixed when broken, to something to protect and prevent damage from occurring. Yet, as the members and staff become more educated, the environment continues to change for the better.

Even small shifts allow for big improvements. Furthermore, knowing that the collection would be far worse without a conservator championing its cause heightens this work's sense of purpose. The Union League Club should be commended for its foresight in establishing an in-house conservation program. Perhaps the most telling fact is that the Club is the only institution in the city besides the Art Institute of Chicago to have a painting conservator on staff.



Figure 1. The Union League of Chicago's original Clubhouse built in the 1890's.



Figure 2. A wedding reception held in the Main Lounge of the Union League Club of Chicago.

## STUDIO TIPS

### HOME-MADE HEAT TRANSFERABLE SILICONE RUBBER

Dean Yoder, Paintings Conservator

During my investigations into a heat transferable silicone rubber used to coat heated spatulas, I have discovered that the basic ingredient is an iron oxide powder that is added to an RTV silicone rubber. Currently, most of these pre-manufactured heat transferable silicones are only available in very large quantities without "trial kits". So, here is a simple method to make your own.

First of all, one must be sure to use an "addition cure" silicone. The catalyst is platinum with an upper heat limit of 400 degrees. This will all but eliminate the possibility of the heat damaging the rubber, causing it to break down or liquefy.

Because rubber is an insulator, heat transmission will be slowed. In order to reduce warm up time and increase the transmission of heat, iron oxide, a heat absorbing material, may be added at the time of mixing. The iron oxide technology is proprietary, but I am told one may consider using 5% to 10% and possibly up to 20% iron oxide for this purpose.

### TEFLON FOLDER FROM TALAS

Dean Yoder, Paintings Conservator

Recently I had an opportunity to work with Natalia Nikolayev, formerly a conservator of icons at the Russian Museum in St. Petersburg, now living in Indianapolis, IN. Natalia was astonished that we did not have a Teflon folder in our studio, since it is an indispensable tool for Russian conservators. The Teflon folder is used to set down tenting or flaking paint layers in conjunction with sturgeon glue. Fortunately, Talas now carries this product, so we ordered it straight away. Most of us use sturgeon glue in much the same way. To review briefly: we usually begin with a 3-5% solution (traditionally prepared) that is applied by brush over the area of tenting. Japanese tissue or better yet, Russian cigarette paper is placed over the surface which has been saturated with glue. More sturgeon glue can then be applied onto the tissue if the surface becomes too dry. A moistened piece of paper towel is then placed over the tissue. Silicone Mylar is then placed over the moist paper towel to hold in the moisture while the area is gently warmed with a heated spatula or tacking iron, always using very low heat. At this point we had always used the heated spatula to finish setting down the paint layer with good results.

The difference in her technique is that once the paint layer is sufficiently plasticized by the heat and moisture, the Teflon folder is used to gradually work the tented paint, instead of continuing on with the heated spatula. The Teflon glides over the surface of the warm, still tacky, tissue without sticking. Generally, one works from the center (high point) of the tented paint outward. Another advantage is that the Teflon folder can be held directly under your finger allowing you to almost feel the surface of the painting through the tool. The Teflon is firm but a bit flexible and has the necessary "give" to prevent damaging a delicate surface. Working with a "cold" tool on a warm pliable surface also helps prevent the chance of "glassing" the surface. It is gentler than a heated spatula, providing a bit more control at the critical moment when the paint layer is being set down.

The shape of the Teflon folder can be modified to fit the curve of your finger, though one must be careful when sanding or carving as Teflon is a hazardous material in a powdered form. A mask and gloves should be used when sanding.

The heated spatula is then used again after the tenting is completely set down to drive out some of the remaining moisture and improve the bond, always using a soft cushion between spatula and paint layer. Weights are placed over the set down paint for about a week or two. Removing the tissue is also a bit of an art. The area is lightly moistened with water; then the tissue is carefully rolled up on itself, almost tickled off the surface.

A final note about Russian cigarette paper: It seems that this product is nowhere to be found outside of Russia. This paper is very thin and translucent, similar to onion skin paper, with thin lines 1mm apart. It is used because it shrinks more in one direction allowing the paper to aid in setting down tented paint. Its properties are very interesting and there seems to be no substitute for it in this country. We are working to find a source for it in Russia. Perhaps, someone in the tips session knows where to find it.

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Yoder Conservation, Inc., 12702 Larchmere Blvd., Cleveland, OH 44120

## **SWAB CONTAINER**

Robert Proctor, Paintings Conservator

We often use wet wipes or Wet Ones in our studio to wash our hands. The cylindrical containers have a pop top with an "x" shaped opening in the plastic. When the wipes are gone, these containers make excellent used swab containers. The cotton pulls right off when a swab is inserted in the "x" shaped opening. The tops are removable so that the container can be emptied and re-used.

## **SUPPORTING AN OVAL PAINTING ON AN EASEL**

Robert Proctor, Paintings Conservator

To keep an oval painting from tipping when it is on the easel (or to prevent it from rolling in a storage bin), screw a rectangular piece of Fomecor onto the back and the painting cannot roll. This same piece of Fomecor can be cut down afterwards to become the backing board for the painting. In this way, you will not be putting additional screw holes in the stretcher.

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Robert Proctor, Whitten and Proctor Fine Art Conservation, 402 Byrne Street, Houston, TX

## Sony Cybershot DSC-F707, F717, F828

### A Digital Camera for the Conservation Studio

Steven Prins, Painting Conservator in Private Practice \*

If you are thinking of purchasing a digital camera for use in the conservation studio/lab, let me recommend the Sony Cybershot DSC-F Series. While many of their features are comparably matched by other digital cameras on the market, one feature of these Sony cameras makes them a superior choice for the conservator: they have built-in infrared photo capabilities! Figure 1 depicts the current model, the F828, an 8 Megapixel camera widely available for about \$1,000.00. Figure 2 depicts the F717, its 5 Megapixel predecessor, which remains available while supplies last at \$600-700.00 at retail outlets. Figure 3 depicts my F707 in use on a camera stand in the studio at Steven Prins & Company. Figure 4 illustrates it on a portable tripod for on-site use.

In fact, the sensors (CCDs) of digital cameras are more sensitive to infrared light than they are to visible light. So digital camera makers place an IR cut-off filter in the light path between the lens and the sensor so that they can record visible light without interference from the IR. Sony has taken advantage of this to provide infrared photo capability for use in low or no (visible) light situations. A switch on the camera triggers a mechanism that removes the filter from the light path and turns on two small IR light-emitting diodes built into the lens housing/camera body. This allows the camera to capture images in the absence of visible light by illuminating the scene with IR light and recording the unfiltered image. This feature is called *Nightshot* on Sony products, and is found on some of their digital video cameras as well.

This same feature allows the conservator to use the camera to make IR photographs or reflectographs, as they have been called to distinguish them from IR film photographs. In other words, this camera allows the penetration of many paint films to reveal underpainting/underdrawing. Figures 5 & 6 are visible and IR photos made in the studio. The rapid, cursory underdrawing of George Washington's chin, ear, collar, etc. in this small version of Leutze's *George Washington Crossing the Delaware* are all clearly visible in the IR. By contrast, no such underdrawing was detected when the larger version attributed to Eastman Johnson from the Manooagian Foundation was photographed at the White House (see Figs 7 & 8).

Some brief notes on the use of these cameras may be useful. First of all, the IR sources built into the cameras are not very useful for conservation documentation. The fact that they are mounted in the lens housing (F707/717) or on the camera body (F828) provides axial illumination that results in severe glare on the reflective surface of a painting. This is readily resolved by simply blacking out the built-in light source and providing an alternative source of IR light from a more oblique incident angle. I achieve the former simply by placing small pieces of black photographic masking tape over the diodes.

In the studio and on site, I prefer to use an IR source made by Sony for use with their cameras (see Fig. 9). This one (Model #HVL-IRC) uses a rechargeable battery, but an AC-powered model is available as well. Both models have controls for the light level, seen in the lower-right corner of the lamp housing in Fig. 9. The camera stand has an opposed arm that permits mounting the light at an oblique angle; for the tripod I had a side arm made for this purpose (see Figs. 3 & 4 respectively). Whether on the camera stand or tripod, the IR source is mounted to a universal ball joint to permit adjustment.

Alternatively, on site or in the studio, ambient light from sunlight or incandescent lamps may be used, or these may be supplemented by a secondary incandescent source. But visible light must be filtered out. To do this, I use a Tiffen #87 filter (58 mm), just like those used for IR film photography. Other filters for this purpose are available, and there is certainly room for some investigation of the effectiveness of filters with different cut-off wavelengths by different manufacturers. At least one company, KAYA Optics of Japan, promotes the use of their

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Best results are obtained, that is information capture is optimized, by shooting as close to the painted surface as possible. I usually shoot from about 4-6" away. A track set up is very useful for systematically scanning a canvas. But I just move my camera stand/tripod in uniform increments as necessary.

But that is not the only useful feature of these (and other) digital cameras. In addition to IR photography, they allow relatively simple ultraviolet fluorescence photography as well. What is nice about doing digital UV photos is that they can often be made even without a filter. Figs. 10 & 11 illustrate UV photos made without a filter in which the retouching is clearly differentiated in a familiar manner. Better results can be obtained with a standard #2A yellow filter, which will filter out reflected UV. But we have had great success without and seldom have to resort to filter use for UV, especially when photographing details like those in Figs. 10 & 11.

For additional information and specifications for these useful digital cameras go to the Sony web site ([www.sony.com](http://www.sony.com)) or contact a distributor near you for a test drive.

## Figures



Fig. 1 Sony DSC-F828, 8.2 Mp Digital Camera



Fig. 2 Sony DSC-F717, 5 Mp Digital Camera

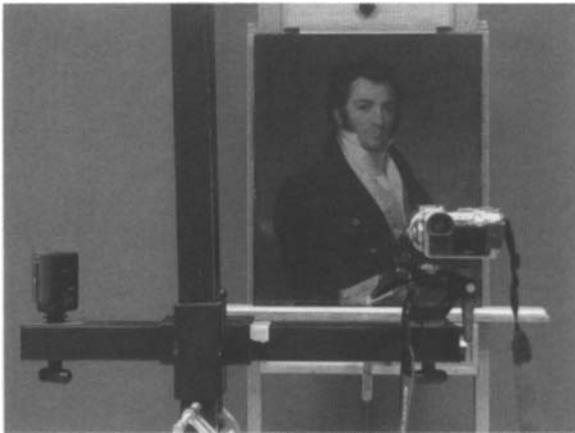


Fig. 3 Sony DSC-F707, 5 Mp Digital Camera on camera stand, with opposed IR light source (Sony Model #HVL-IRC).

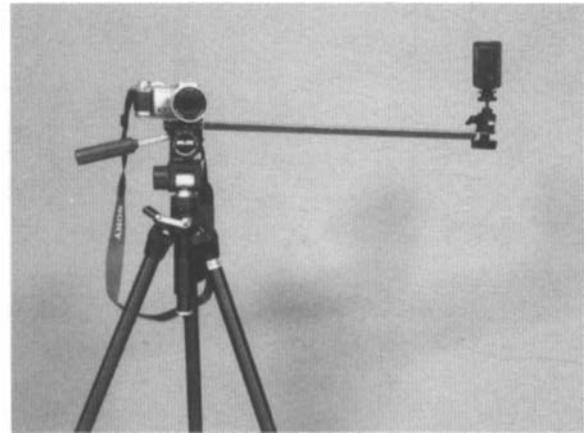


Fig. 4 Sony DSC-F707 on tripod with extension arm to support oblique IR light source.



Fig. 5 Detail of *George Washington Crossing the Delaware*, after Leutze, normal light.



Fig. 6 Detail, infrared photograph made with studio set up illustrated above. Note underdrawing of ear, cheek and collar.



Fig. 7 Detail of *George Washington Crossing the Delaware*, by Eastman Johnson after Leutze, normal light.



Fig. 8 Detail, infrared photograph made on site with the tripod set up illustrated above. No underdrawing was detected in this area.



Fig. 9 Detail of Sony battery-powered infrared light source (Model #HVL-IRC).



Fig. 2 Detail of *Aspen Landscape* by Bert Greer Phillips, ultraviolet fluorescence photo.



Fig. 11 Detail of *Portrait of the Hon. Lucy Shepard...* attr. to G. Kneller, ultraviolet fluorescence photo.

