The Art of Conservation IV: Public controversies in eighteenth-century painting restoration: the history of the transfer technique in France

by ANN MASSING

On 14th October 1750 the first public art museum in Paris was opened in the gallery of the Palais du Luxembourg. On show were one hundred and ten paintings, which ultimately became the basis of the collection now displayed in the Musée du Louvre. The first painting a visitor saw on entering the exhibition was Andrea del Sarto’s Charity (Fig. 55) transferred onto a new piece of canvas; next to it, on another easel, was its original ‘rotten’ worm-riddled wooden support. The catalogue of the exhibition praised the transfer and restoration of this, one of the most famous paintings in Europe at that date. The public was surprised; reviews in the gazettes were enthusiastic; the procedure was discussed and everyone expressed their amazement. King Louis XV himself admired the result.

Robert Picault (1705–81; Fig. 54), an obscure artisan originally employed to clean the King’s bronzes and gilded surfaces, was a clever man who knew how to exploit a situation. Claiming that the treatment had taken him nine months, working day and night for six months plus ‘watching’ the process for another three, he was lavishly paid for his ‘success’ and received a pension for himself and for his son and assistant, Jean-Michel, also a restorer of paintings. In 1752 Picault was allowed to transfer another panel of great value, Raphael’s St Michael vanquishing Satan. This was again a ‘success’: Picault’s reputation was made; he was given a royal salary, and a picture transferred by him cost more than a new painting.

The secrecy surrounding Picault’s technique fuelled the public’s interest. In fact, Picault’s ‘secret’ has been so well kept, that it was necessary to wait until the twentieth century when improved methods of technical examination made it possible to reach a more complete understanding of what he did. Details of the transfer technique are of interest not only because of the popularity of the procedure in France in the latter half of the eighteenth century, but also because the technique was used widely throughout Europe over the following centuries: when woodworm was active in a panel support and/or the paint surface was flaking so severely that the then-current methods of consolidation were not sufficient, the paint layer was transferred to another support. Transfers of panel paintings onto canvas or another support continued until the latter half of the twentieth century. Some of the last transfers were done in the old military barracks known as the Fortezza da Basso in Florence, following the flooding of the River Arno in 1966. Two of the last major transfers of a painting onto a new support – Cima da Conegliano’s Incredulity of St Thomas and Sebastiano del Piombo’s...
and why it became so popular in France. The present author has written extensively about these topics, this article discusses technical information about early transfer techniques gleaned from recent restorations.

We now know that the method of transferring panels to canvas employed by Robert Picault was simple enough, but horrific. The first operation was to remove the paint layer from the support. Picault must have allowed nitric acid vapours to pass through the reverse side of the panel to soften the ground: in Italian panels this was traditionally a white gesso. He was obliged to watch the procedure day and night. The painting was removed from the acid at just the right moment, after the ground had been corroded but before the acid attacked the paint layer. It may be that the paint surface was secured with facing paper applied to the front of the paint layer (cartonnage), or that no facing paper was used on the paint surface while the acid was at work. The paint layer was then detached, lifted with a spatula, like 'lifting a stamp from an envelope' (and like the sturpp method of transfer for wall paintings). The reverse of the painting was then visible, including any underdrawing.

The reverse of the paint layer was then glued onto a thin gauze or fine canvas support, which was rolled onto a cylinder to even out the glue layer and remove air bubbles trapped between the paint layer and its new support. The cylinder was initially made of wood covered with a soft material such as felt, but by 1795 polished copper was preferred, as the smooth surface posed less risk to the painting than pine wood. On some paintings Picault may have replaced the original white gesso ground with a reddish brown underlayer, and he seems to have used layers of paper instead of gauze or fine canvas for the first layer next to the reverse of the paint surface.

The next operation was to glue the paint layer onto a new canvas support using Picault's 'secret' adhesive (marouflage), which was probably oil-based and also contained substances such as resin or perhaps wax. Finally, the painting was tensioned onto a stretcher and replaced into its frame. The adhesion of the paint layer to the new support was so strong that it was believed the life of the painting was prolonged.

This was the case with Rosso Fiorentino’s Challenge of the Perides, which was transferred by Robert Picault in 1765. During the 1792 restoration, it was discovered that next to the paint layer were remains of the original gesso, as well as glue and a layer of paper, then more glue and the transfer canvas followed by a loose lining. Picault considered his work important enough to sign and date his restoration on the reverse of the transfer canvas.10

It was suggested that Picault’s adhesive was composed of calcium resinate and glue sizing (with residues of the gauze used in the transfer procedure), and that the aggressiveness of Picault’s

---


9 Gilberte Emile-Mâle (1912–2008), former chief de service de la restauration des peintures au Louvre, was able to suggest the hypothesis for the transfer technique through her research into contemporary letters and journals and with the aid of the chemist Jean Petit (1919–2006), former Director of the Laboratoire de Recherches at C.N.R.S. (French National Centre for Scientific Research), see the report on Andrea del Sarto’s Chantilly, Dossier de Restauration no.F2703, CnRMF P3208, The transfer method according to Jean Petit (1960). See also G. Emile-Mâle: ‘La première transposition au
technique, combined with a new adhesive on an old painting, contributed to the relatively short duration of his restorations. 11

By 1780 Andrea del Sarto’s Charity needed re-restoration, only thirty years after Picault transferred it from panel to canvas; in 1801 it was mounted onto two canvases by François-Toussaint Hacquin, and from 1840 to 1848 it was again transferred. Other early transfers by Picault shared a similar fate. However, at the time the transfer procedure was seen as a panacea and hailed as the most satisfactory manner of preserving panel paintings for future generations. The method that was to become the established means of transfer was, however, not Robert Picault’s.

The transfer technique had been invented in Italy earlier in the eighteenth century, 12 first for frescos, then for canvas paintings. As to who first introduced the procedure to France is a subject of debate, but Picault’s first restorations for the French Royal Collection in 1750–51 were the beginning of the art-loving public’s fascination with the transfer procedure. Initial surprise and amazement were quickly followed, however, by curiosity, and the admiration the administrators of the French Royal Collection initially displayed towards the procedure turned to exasperation as Picault demanded ever-increasing sums for his work. From 1753 he had rivals.

The Flemish painting restorers Joseph-Ferdinand Godefroid (c.1700–1741) and his wife, Marie-Jacob (née Van Merlen, c.1701–1775), known after her husband’s death as La Veuve Godefroid, settled in Paris around 1729. In 1741 Joseph-Ferdinand was killed in a duel provoked by a quarrel over the attribution of a painting by Carlo Maratta. His widow took over their painting restoration business and had a long and prolific career: thirty-two years of service, which included being in sole charge of the conservation of the French Royal Collection for fifteen years from 1760. The Godefroid family restored paintings for the Royal Collection for over sixty years; they also restored paintings for private clients. The widow Godefroid employed other restorers, such as François-Louis Colins (1699–1760), the art dealer and painter from Brussels known throughout Europe as a talented pointilleur, a repainter of old-master paintings, and she also trained her son, Joseph-Ferdinand-François Godefroid (1729/30–1788), 13 to do the cleaning and retouching of paintings. She herself was skilled in the structural work – and she knew how to transfer paintings. Her grandson wrote in 1789 to the Directeur des bâtiments du roi, the comte d’Angiviller, that his grandfather had brought the secret of the transfer of paintings with him from Antwerp. The widow Godefroid’s method was less risky, and her ‘secret’ was hot water and patience. In 1752 she publicly exhibited a half-transferred panel to demonstrate her technique, and her work was presented to King Louis XV. The next year she was chosen over Robert Picault to transfer a painting from the Royal Collection, a panel then attributed to Hans Holbein (Fig. 56). Picault had given an estimate of 800 livres, Mme Godefroid’s estimate was 500 livres. 14

Other restorers succeeded in mastering the transfer technique. In 1766 Jean-Louis Hacquin (before 1726–1783) undercut an estimate made by the widow Godefroid for the transfer onto canvas of a painted ceiling (now destroyed) by Simon Vouet in the Château de Vincennes. Mme Godefroid was by that time a well-established restorer, probably in her late fifties, and may have put up her prices on a job that she really did not want to do. When costing the transfer, she predicted that it might be more difficult than anticipated since Vouet had not followed the ‘normal’ painting techniques. In the eighteenth century the first layer of paint of an oil painting, the ground, or the impression, was usually allowed to dry before further paint layers were applied, and it was this ground layer that could be used to separate the paint layers from the support during the transfer procedure. For provoking microfissures in the paint layer and oxidation of the resinous components. On the instability of Picault’s technique, see also F. Barrès: ‘Les peintures transposées du Musée du Louvre, étude des techniques de transposition en France, de 1750 jusqu’à la fin du XIXème siècle’, ICOM Committee for Conservation, 14th Triennial Meeting, The Hague, September 2005, Preprint 2 (2005), pp.1001–08, esp. pp.1001–02.

The transfer technique is said to have originated in Italy c.1711–25, probably concurrently in Cremona; see Coñi, op. cit. (note 8), and in Naples; it was introduced in Lorraine by Léopold Roxin in 1740 and in Paris by Robert Picault; see Bergon et al., op. cit. (note 1), p.268, citing earlier articles by Émile-Millé. For a résumé of the early printed sources on the transfer technique, see Maaing 2012, op. cit. (note 1), pp.42–49.

At the time of his mother’s death in 1773, Joseph-Ferdinand-François Godefroid had been working on Royal Collection paintings for about ten years and was preparing to step into his mother’s shoes, but the comte d’Angiviller decided that he was to be paid by the piece; ibid., chapter 1, esp. pp.74–75.

65. Man with a glove, by Joos van Cleve. Canvas transferred from panel by Mme Godefroid in 1753 when the painting was attributed to Hans Holbein. 66.5 cm by 55.5 cm. Musée des Beaux-Arts, Nantes.

11 In 1972 Rosso Fiorentino’s Challenge of the Parades was restored (Service de la restauration des peintures des musées nationaux: C2RMF F5040, Dossier de Restauration no.P785). A loose protective canvas was removed to reveal a finely woven canvas transferred onto the panel. (note 1), p.268, citing earlier articles by Emile-Mâle. For a résumé of the early printed sources on the transfer technique, see Maaing 2012, op. cit. (note 1), pp.42–49.

12 The transfer technique is said to have originated in Italy c.1711–25, probably concurrently in Cremona; see Coñi, op. cit. (note 8), and in Naples; it was introduced in Lorraine by Léopold Roxin in 1740 and in Paris by Robert Picault; see Bergon et al., op. cit. (note 1), p.268, citing earlier articles by Émile-Millé. For a résumé of the early printed sources on the transfer technique, see Maaing 2012, op. cit. (note 1), pp.42–49.

13 At the time of his mother’s death in 1773, Joseph-Ferdinand-François Godefroid had been working on Royal Collection paintings for about ten years and was preparing to step into his mother’s shoes, but the comte d’Angiviller decided that he was to be paid by the piece; ibid., chapter 1, esp. pp.74–75.

14 At the time of his mother’s death in 1773, Joseph-Ferdinand-François Godefroid had been working on Royal Collection paintings for about ten years and was preparing to step into his mother’s shoes, but the comte d’Angiviller decided that he was to be paid by the piece; ibid., chapter 1, esp. pp.74–75.

15 At the time of his mother’s death in 1773, Joseph-Ferdinand-François Godefroid had been working on Royal Collection paintings for about ten years and was preparing to step into his mother’s shoes, but the comte d’Angiviller decided that he was to be paid by the piece; ibid., chapter 1, esp. pp.74–75.
wall paintings, the procedure was similar. Godefroid reported that Vouet had painted directly onto the plaster and with much turpentine, so that the colour had sunk into the plaster instead of lying on top of it. The transfer of the paint layers onto canvas was therefore impossible. The first stage, *l’impression*, would of course be lost by any method. Jean-Louis Hacquin, a restorer previously unknown to the Bâtiments, was asked if he would carry out the transfer for 600 livres, which he accepted. The work was completed so well that Hacquin was awarded more work, and thus began his long career as a painting restorer for the French Royal Collection.

In 1768, when Hacquin was probably only in his mid-thirties and his prices were still low, he was given an oval painting on panel to transfer, Domenichino’s *Timolea before Alexander*.15 His transfer method was not Picault’s, who managed to save the original panel; instead the original panel was gradually removed with a gouge, a chisel and then a scalpel. The paint layer was then attached to a support composed of fine canvases and gauzes (and pieces of paper and silk) before it was glued onto the lining canvas.

In 1771 Hacquin transferred Sebastiano del Piombo’s *Resurrection of Lazarus* that was then in the Orléans Collection (now in the National Gallery, London).16 In 1777 he began the structural treatment of twenty-two paintings by Eustache Le Sueur from the cabinets of the Hôtel Lambert in Paris (originally from the cloister of the Chartreuse de Paris, now Musée du Louvre, Paris); he transferred four from panel onto canvas and one from canvas to canvas with marouflage.17 When transferring the panels, he removed the old wooden support mechanically. On top of the newly uncovered underside of the paint layer of *St Bruno’s journey to the Chartreuse* he applied two layers of fine silk;18 for *St Bruno teaches theology* he used a double layer of paper taken from an old edition of St Augustine’s *Confessions*.19 The silk or the paper was embedded in the glue between the ground and a thin canvas. The last step was to attach the linen transfer canvas; the adhesive was animal glue and glue paste.20 Jean-Louis Hacquin died in 1783 before finishing the project, which was completed by his son, François-Toussaint Hacquin.

The career of François-Toussaint Hacquin (1756–1832) spanned a period of momentous change in French history; during these unsettled years there were disputes and public debates in which painting restorers participated, and as a result there was much publicity surrounding the restoration profession – including the transfer process, although certainly not limited to it. Restorers recorded some of their methods in writing, which would not have happened without these controversies, and these texts are of great interest.21François-Toussaint started working as his father’s assistant when he was about seventeen, thereby beginning his career as a privileged employee of the Crown. After 1774, however, under the appointment of Directeur des bâtiments du roi, the compte d’Angiviller, the situation changed. After his father died in 1783, when François-Toussaint was twenty-seven, he was required to prove his merit rather than automatically inheriting the position as had been usual in the past. Eventually d’Angiviller became convinced of his suitability, and François-Toussaint went on to have a career working on Royal Collection paintings that was as productive as his father’s. Unlike his father, who began as a master cabinet-maker, François-Toussaint built his reputation on the treatment of canvas paintings, improving the method of lining while treating numerous paintings from the Royal Collection. He also performed many transfers, including, for example, Nicolas Poussin’s *Institution of the Eucharist* (Musée du Louvre, Paris) in 1796–98. During the recent re-transfer of 1982, three canvases from the eighteenth-century transfer were uncovered: next to the original (red) ground layer was a thin gauze (called *toile a beurre*, or ‘butter muslin’) stuck down with lead white (*céruse*) in oil (this oily layer was used to regenerate and consolidate the original ground and paint layers); then came a linen canvas (*demi-toile*); followed by the lining canvas.22 The adhesive was a resin paste that Hacquin used in his linings ‘*au gras*’. Hacquin continued to work on paintings from the Royal Collection throughout the many changes brought about by the French Revolution and the nationalisation of the painting collection – although he also had a private practice (which included preparing canvases for artists, conducted from an attic room over his studio in the Louvre). He was employed by the Musée National des Arts (1793), the Musée Central des Arts (1797), by the Musée Napoleon (1803) and finally by the Musée Royal (1814) – which became known as the Musée du Louvre only in 1848.

The years of the Revolution were not without difficulties; François-Toussaint was a member of the Commission du Muséum (1792–94), and as a result came into conflict with the restorer Jean-Michel Picault, the son of his father’s former rival, and with Picault’s friend Jean-Baptiste-Pierre Le Brun (1748–1813), the first ‘modern museum registrar’ who was also a painting restorer, a picture dealer and the husband of the painter Elisabeth Vigée Le Brun. Jean-Baptiste-Pierre Le Brun and Jean-Michel Picault attacked the members of the Commission (who had not hired the latter) and demanded that a competition, or concours, should be held to recruit the restorers who would work for the Republic.23 Picault published a pamphlet with calumnies against Hacquin, who was identified by name.24 Hacquin responded to justify himself and his procedures, and for the first time painting restorers entered into a public debate and as a result their ‘secrets’ were discussed by a wide audience of interested amateurs.

Then an even larger controversy erupted: the Affair Marin. In December 1797 a deputy named Anthelme Marin accused the directors of the Louvre of negligence, notably of damaging the paintings brought from Italy to Paris by faulty restorations.

\[1\] During the 1961–62 restoration of Domenichino’s *Timolea before Alexander*, the original transfer canvases and layers of paper were uncovered. Pieces of fine canvas (‘gaze’) were found beneath the lining canvas, a sample of the paper embedded in the glue used in the transfer process between the ‘gaze’ and the canvas was discovered. The text was identified as a mid-eighteenth-century manuscript by Clasmambault (1617–1740); the original transfer canvas was covered with a fine layer of greensh– grey ground (Service de la restauration des peintures des musées nationaux: C2RMF F1429, Dossier de Restauration no.P499).

\[2\] *St Bruno teaches theology* by Eustache Le Sueur was re-transferred by the Service de la restauration des peintures des musées nationaux in 1980: C2RMF F1668, Dossier de Restauration no.P425.


Hacquin was named and accused of having ‘flattened’ (like a ‘panneau de voiture’) a painting by Correggio from Parma. Again Hacquin felt obliged to take up his pen to defend himself. He was proved innocent, but only after a long inquiry, and restoration policy was once more in the headlines.\(^{23}\)

The controversy that affected Hacquin most, however, concerned the transfer of another of the many spoils of the Napoleonic wars, a masterpiece by Raphael, the Madonna of Foligno (Vatican Museums; Fig. 57) — and Hacquin’s transfer method was published not only in France but elsewhere in Europe. From 1797 the Conseil d’Administration of the Musée Central des Arts was establishing a coherent restoration policy. In order to advance the profession, Hacquin was reluctantly persuaded to describe in detail his transfer method as used for the Madonna of Foligno to a commission of experts composed of scientists, artists and art historians appointed to supervise his work, perhaps the first in what has become a tradition of committees to examine the progress of a restoration. They wrote down his method and published it — to Hacquin’s dismay. A summary of this report follows.\(^{26}\)

To accomplish the flattening of the panel, a facing of thin canvas was pasted over the paint surface before placing the panel paint-side down onto a table. Hacquin then cut a series of slots into the reverse of the panel into which he fitted small wooden wedges (called *serratura* in Italian and used in the Louvre until 1968).\(^{27}\) He made these swell by covering the entire reverse of the panel with damp clothes. These were renewed as necessary, and gradually the panel’s warping lessened and the panel became flat again. As the panel flattened, the split on the painted surface closed up. To keep the split together, Hacquin secured the edges with thick glue, then fastened battens onto the reverse to hold the panel into the flattened shape. The panel was then allowed to dry thoroughly.

After covering the surface of the painting carefully with another layer of gauze and two layers of paper (cartonnage) he again put the panel face-down. The panel was fastened to a table and the damaged wood removed in three lengthy operations. First Hacquin used fine saws, one in the direction of the grain of the wood, the other against the grain, until the wood was 10 mm. thick. He then used a plane diagonally across the grain to remove short curls of wood until the panel was 2 mm. thick, and finally a serrated flat plane which worked like a fine rasp. In the end the paper-thin wood was moistened in small sections until it detached and could be lifted off with a rounded knife.

When the priming layer was removed, not only did Raphael’s drawing appear, but also the fillings, oils and varnishes applied during previous restorations over the years to keep the painting from flaking. These additional substances which had accumulated beneath the paint layer now had the undesired effect of making the restoration more difficult — as they had to be removed. The glue on the surface was dampened and rubbed away; the oil and varnish required more effort to soften and detach them. Hacquin wrote that a knife and much patience were required.

It was felt that the painting had ‘dried out’ with time, and to ‘give it back its old suppleness’ Hacquin rubbed the underside of the oil paint layer, which now lay exposed, with cotton-wool soaked in oil. The excess was dried off with muslin. Hacquin then replaced the former size and chalk ground with an oil ground of white lead (ocher)\(^{28}\) and linseed oil applied with a soft brush. After allowing the new ground layer to dry for three months, gauze was glued over the oil ground, and over this a fine canvas. When the painting was turned over, the paper and gauze (cartonnage) on the front of the painting were removed, and any unevenness of the paint surface corrected with a warm iron (used over oiled paper).

After again securing the new smooth paint surface with a facing (cartonnage), the canvas and gauze were once more taken off the back of the painting, and the reverse given another oil ground. This was then covered with very fine and supple gauze followed by an unbleached canvas. The outer surface of this canvas was covered with resin. In the meantime an unbleached canvas the size of the painting was stretched. One side was covered with resin, and the back of the painting was finally covered with card to the same size, the other side of the gauze folded over the panel; see Massing 2012, op. cit. (note 1), pp. 119 and 137–43.

---

\(^{23}\) Ibid., pp. 130–131, and chapter 7.

\(^{24}\) Ibid., pp. 175–180.


\(^{26}\) Bergeon et al., op. cit. (note 1), p. 275. Today the warp of a panel painting tends to be accepted and is accommodated in the framing.

\(^{27}\) See Barrès, op. cit. (note 11), p. 1066, for an analysis of the lead white in the oil ground used by François-Toussaint Hacquin.
THE TRANSFER TECHNIQUE IN FRANCE

glued onto this with a resin paste. Great care was taken not to stretch the painting too tightly or at all unevenly. Only after all this work was finished did the actual restoration of the picture surface begin.

Hacquin’s report on the restoration of Raphael’s Madonna of Foligno was the most detailed and authoritative statement on the transfer procedure ever to have appeared in print. Indeed, it was so detailed that Hacquin complained that his trade secrets had been divulged. This was only one of his conflicts with the French Administration, but the controversy about the transfer of the Madonna of Foligno became an international news item.

Despite their disagreements, the Administration held François-Toussaint Hacquin in high esteem. He was also respected abroad; by the beginning of the nineteenth century it had become the custom of foreign collectors to send their pictures to well-known restorers such as Hacquin in Paris. Near the end of his life Hacquin was given the official title Rentoilier du Musée Royal. A French school of restoration was planned, with Hacquin teaching about the supports of paintings; although the plan did not materialise, Hacquin trained other restorers, including Joseph Fouque and his son-in-law Emile Mortemard.

Joseph Fouque (1755–1819), one year older than Hacquin but considered his student, worked from 1792 for twenty-seven years in the Louvre with Hacquin, using on the whole a similar technique, but with a tendency to deviate from Hacquin’s rigorous approach to his lining and transfer work. Fouque completed several transfers, including Sebastiano del Piombo’s Visitation (Figs. 58 and 59). Recent examination of this work has revealed that Fouque used a priming layer of lead white ground with glue and oil to make an emulsion, followed by a traditional glue lining instead of Hacquin’s ‘au gras’ with resinous adhesives that are less susceptible to changes in humidity. The transfer canvas was in two pieces joined with a seam – of which Hacquin would not have approved, as this seam added to the irregularities of the surface.

After François-Toussaint Hacquin’s death in 1832 he was succeeded by his son-in-law, Emile Mortemard, or Mortemart (1794–1870). From the analysis obtained from twentieth-century conservation treatments, it is possible to ascertain that Mortemard gradually deviated from Hacquin’s meticulous procedures; he did not remove the original ground but covered it with a lead-white oil layer, and he did not use Hacquin’s method ‘au gras’ to attach the layers of canvas but instead preferred to use a water-based glue. The method was basically similar, however, and was published by Simon Horsin Déon in 1851. One of the works Mortemard transferred was Federico Barocci’s Circumcision (Musée du Louvre, Paris). During twentieth-century treatments remains of the original transfer were found: next to the paint layer was a very thin ‘gaze’ (gauze or thin cloth) stuck with Venetian turpentine to the original grey/black ground which was covered with a red/brown ground. Below that was a layer of white glue school of restoration.

See Massing 2012, op. cit. (note 3), chapter 4, on Jean-Louis Hacquin, esp. p. 115, note 103, for more on the content of Jean-Louis Hacquin’s glue. For a recent account of a transfer procedure, see Wyld and Dunkerton, op. cit. (note 7), pp. 44–59.

See Massing 2012, op. cit. (note 1), pp. 174–77, for François-Toussaint Hacquin’s complaints about his fee and the revolt against the Administration that he organised.


Ibid., p. 1006, for an analysis of the adhesive based on resin diluted in turpentine and oil mixed with lead white, which was found to be similar to the mixture used by François-Toussaint Hacquin for his linings ‘au gras’ and also used in his transfers. See Massing 2012, op. cit. (note 1), chapter 4, on Jean-Louis Hacquin, esp. p. 115, note 103, for more on the content of Jean-Louis Hacquin’s glue. For a recent account of a transfer procedure, see Wyld and Dunkerton, op. cit. (note 7), pp. 44–59.

Ibid., p. 1006, for an analysis of the adhesive based on resin diluted in turpentine and oil mixed with lead white, which was found to be similar to the mixture used by François-Toussaint Hacquin for his linings ‘au gras’ and also used in his transfers. See Massing 2012, op. cit. (note 1), chapter 4, on Jean-Louis Hacquin, esp. p. 115, note 103, for more on the content of Jean-Louis Hacquin’s glue. For a recent account of a transfer procedure, see Wyld and Dunkerton, op. cit. (note 7), pp. 44–59.

31 See Massing 2012, op. cit. (note 1), esp. notes 18–21.

32 For an analysis of the adhesive based on resin diluted in turpentine and oil mixed with lead white, which was found to be similar to the mixture used by François-Toussaint Hacquin for his linings ‘au gras’ and also used in his transfers. See Massing 2012, op. cit. (note 3), pp. 189–90, for the plans of 1798 for the French school of restoration.


34 Sebastiano del Piombo’s Visitation was restored by the Service de la restauration des peintures des musées nationaux in 1999 (C2RMF F5256, Dossier de Restauration no.4251).

35 See Massing 2012, op. cit. (note 1), pp. 174–77, for François-Toussaint Hacquin’s complaints about his fee and the revolt against the Administration that he organised.

36 S. Horsin-Déon: De la conservation et de la restauration des tableaux, Saint Cloud 1851.

37 Barocci’s Circumcision was transferred by Mortemard in 1863; in 1923 re-transferred in the Vatican Museums; in 1955–56 re-transferred by Emile Rostain, in 1972 treated by the Service de la restauration des peintures des musées nationaux (C2RMF M1 315, Dossier de Restauration no.P15).

38 Fig. 59 photographed in raking light before restoration clearly shows the uneven surface due to the transfer.

with Venetian turpentine and a closely woven canvas (demi-toile), followed by a layer of red glue with Venetian turpentine, and then the transfer canvas, which was in two pieces and attached with glue.37

This ‘traditional’ technique of treating damaged panels was used until the twentieth century, only gradually falling out of favour.38 Writing in 1851, Déon found more reasons to justify the transfer technique than Emile Rostain writing over one hundred years later.39 Although the transfer technique had been questioned by some critics early on, and certainly by the twentieth century transfers were accepted, even desired.40 In Russia many panels were transferred as a prophylactic measure, not because they required such treatment, but simply to preserve them in the ‘best possible state’.41

The second half of the twentieth century, like the second half of the eighteenth century, was a period of intense activity in the restoration profession, with many new materials evolving into new techniques.42 The transfer technique was also improved upon, although more significant were the better facilities and better lighting which allowed the available materials and techniques to be used with more precision, and with the avoidance of the obvious dangers related to unsophisticated equipment – for example, using hot irons with no thermostats.

Thus, if one goes by written accounts of restoration, until the 1970s the transfer technique, and indeed most restoration techniques, were not dissimilar to those used in the eighteenth century or even before. There is, however, a difference between what is written down and what is actually done. For example, the use of paper in the transfer process was not recorded in the second half of the eighteenth century.43

The use of paper in the transfer process was not recorded in the written texts, but that it was used in eighteenth-century transfers was discovered in 1958 during the transfer of Sebastiano del Piombo’s Raising of Lazarus at the National Gallery.44 Since then the use of paper has been documented on several transferred paintings. Fine silk embedded in the mixture of glue and flour paste, which was applied directly to the reverse of the paint film together with a residue of original ground, was also found on paintings transferred by Hacquin. This also makes the layer structure inherently more fragile.

There are further difficulties in clarifying the technique even when a written restoration report exists; for example, there are numerous mentions of a ‘gaze’ being used in the transfers. One might suppose that these refer to a similar material, however, the variations in the materials shown in the samples retained by the Centre de Recherches et de Restauration des Musées de France (CeRMO) illustrate that there are numerous possibilities45 – and this shows clearly the importance of these small scraps of evidence that might in themselves seem insignificant. With imprecisions of vocabulary in the reports as well as so many variables in the procedure and in the range of materials, even by the same restorer in the same studio, generalisations about the procedure are difficult, and one is forced to conclude that each transfer, as each individual painting, is unique.

In conclusion, it is important to appreciate that works of art change with time – often as a result of factors inherent in the artist’s choice of materials and technique as well as due to interventions. In this instance we have considered the transfer process, which leads to unalterable changes – perhaps the most obvious being the change in the craquelure system of the paint layer. But changes in the appearance of a painting have multiple physical and chemical causes, some influenced by interference, others caused by the passage of time. And subtle changes of many kinds can have a profound effect on how we view and interpret a work of art.46 The transfer procedure has been a controversial chapter in the history of painting conservation that has intrigued both professionals and amateurs (amateur in the eighteenth-century sense of the word) and has so brought painting conservation, and the ameliorations and alterations to a work of art that it instigates, into the awareness of a wider public – and that can only be positive.

During and after the 1950s there were many more deviations from the ‘traditional’ method of transfer. For example, marine-grade plywood with a flat aesthetic, i.e. non-functional, cradle was used for semi-transfers in the 1950s, and in the 1970s resin-impregnated fibreglass and fibreglass fabric with an aluminium honeycomb core were often chosen for the support (as being even more stable than canvas) using Beva 371 and/or epoxy resin as the adhesive.

It was more problematic to turn over the painting when the paint layer was held not by strong canvas but only by tissue paper facing on the front and another layer of paper on the reverse; see Dunkerton and Howard, op. cit. (note 7), p. 30.44

‘Gaze’ can be translated as gauze, thin cloth or canvas, the fabric referred to could be linen, cotton, fine jute or other material with a thread thickness and thread count variable from extremely fine and loosely woven to strong and tightly woven.45

For more examples of the changes in the appearance of a painting due to its age and the history of its conservation, see P. Taylor: Condition: the Ageing of Art, London 2015.

Obituary

Edith Hoffmann (1907–2016)

The Art Historian and unofficial wartime Editor of this Magazine, Edith Hoffmann, died in Jerusalem on 4th January 2016 at the age of 108. She was born in Vienna on 24th July 1907, the daughter of the Bohemian poet, journalist and diplomat Camill Hoffmann. She spent her childhood in Hellerau, near Dresden, then moved with her family to Berlin in 1920 when her father was appointed by President Tomisl G. Masaryk to the position of press and cultural attaché at the Czechoslovak legation in Germany. Edith Hoffmann studied art history in Berlin, Vienna and Munich, completing her doctorate in 1934 under the supervision of Wilhelm Pinder in Munich with a thesis on ‘The depiction of the citizen in German painting in the eighteenth century’.

In 1934 Camill Hoffmann encouraged his daughter to move to London where she worked as a volunteer in the Print Room at the British Museum for four years. An encounter with the British art historian and critic Herbert Read proved decisive...