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Moroni's 'Canon Ludovico di Terzi': An Unlined Sixteenth-Century Painting

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In preparation for the National Gallery exhibition in 1978 marking the 400th anniversary of Giovanni Battista Moroni's death [1], the few Moroni portraits in the Gallery's own collection that had not been treated in recent years were cleaned. One of them was the three-quarter length portrait of Canon Ludovico di Terzi (Fig.1), unique in being the only known Moroni portrait in which the sitter does not look directly at the spectator. It was also a very unusual painting in another respect, in that the canvas support had never been lined.

Lining (defined in more detail below) is a process of reinforcement carried out more or less indiscriminately by restorers in the past. The rarity of an unlined picture of the sixteenth century made this portrait the subject of particular attention.

Condition

Moroni's *Canon Ludovico di Terzi* (No.1024) was acquired by the National Gallery in 1876. Shortly afterwards it was surface cleaned (a simple removal of surface dirt), retouched on some small spots and revarnished. In 1937 it was polished, probably with a wax preparation. Not until 1960 was any sort of structural repair carried out: in that year the canvas was *strip-lined*, a process of attaching new canvas strips to the very edges of the picture to enable it to be fastened to its wooden stretcher, which was replaced with a new one at the same time.

It is not clear from the conservation records whether the picture had been totally unlined before 1960 or whether there had been strip-linings which were replaced. Hand-written notes in the Gallery archives merely say that the picture was not lined and make no mention of added canvas at the edges. The only photograph (undated) taken before 1960 shows the picture in its frame, the edges concealed.

One indication that the canvas had not been strip-lined before is given by the recorded measurements of the picture. If the original canvas had to be turned over the sides of the old stretcher to attach it, then the overall dimensions would be less than those after the edges had been reclaimed by strip-lining and mounting on a new stretcher. Significantly, the dimensions given in the 1929 National Gallery catalogue are 39 × 31½ in. (0.99 × 0.80 m) whereas the size of the picture surface now is 39½ × 32 in. (1.002 × 0.813 m). It appears, therefore, that ¼ in. of the original canvas had been turned over the stretcher at each edge to provide a tacking margin. It should be noted that the regularly spaced tack holes visible at all four edges (Fig.1) are Moroni's own (see below), although it is quite possible that they were

used again by later restorers to attach the canvas to its supporting stretcher: indeed, it is highly probable, since there are no other holes.

In May 1978 the picture was examined before cleaning. Under a substantially discoloured varnish, the condition of the paint was remarkably good: there were no losses at all of any appreciable size. However, the excellent state of preservation was marred by an irregularity of surface (Fig.2) which reflected incident light in a most distracting way. The deformation was of two kinds: a 'stretcher mark' at all four sides, commonly encountered and caused by a slackened canvas resting against the stretcher bars; and, less commonly, a pronounced horizontal corrugation and cracking of the paint layer associated closely with prominent horizontal lines in the canvas weave. The corrugation was not a feature of the paint layers alone: it was present through the entire structure and was equally visible at the back of the canvas. This was an important factor in determining subsequent treatment.

A picture in the condition of this one would, in the past, have been lined without question. Lining would have strengthened the canvas and eliminated the irregularities, and yet it was ruled out here. To explain the reasoning behind the decision, it is instructive to examine, briefly, the nature of lining.

Lining of paintings on canvas

To *line* a painting is to reinforce it by attaching a second support to the back of the original canvas using a suitable adhesive. To *re-line* a painting is to remove an existing lining and repeat the process. Traditionally, the new support was fine linen and the adhesive was based on animal glue, often in a flour paste mixture. Other materials became commonly used, probably the most radical innovation being the introduction of wax and resin adhesives as far back as the mid-nineteenth century [2].

The purposes of lining have traditionally been threefold: (1) to strengthen a canvas support which may be weak, torn or incapable of being attached to its stretcher (2) to correct deformations of the support and paint layers by application of heat, pressure or moisture — or combinations of those three (3) to ensure firm attachment of the paint layers to the support by penetration and impregnation with the chosen adhesive.

The lining process was devised to achieve these three objectives in one operation. Only in recent years has it been suggested that in many cases it might be more sensible and more desirable to achieve these objectives in separate operations and that in some cases

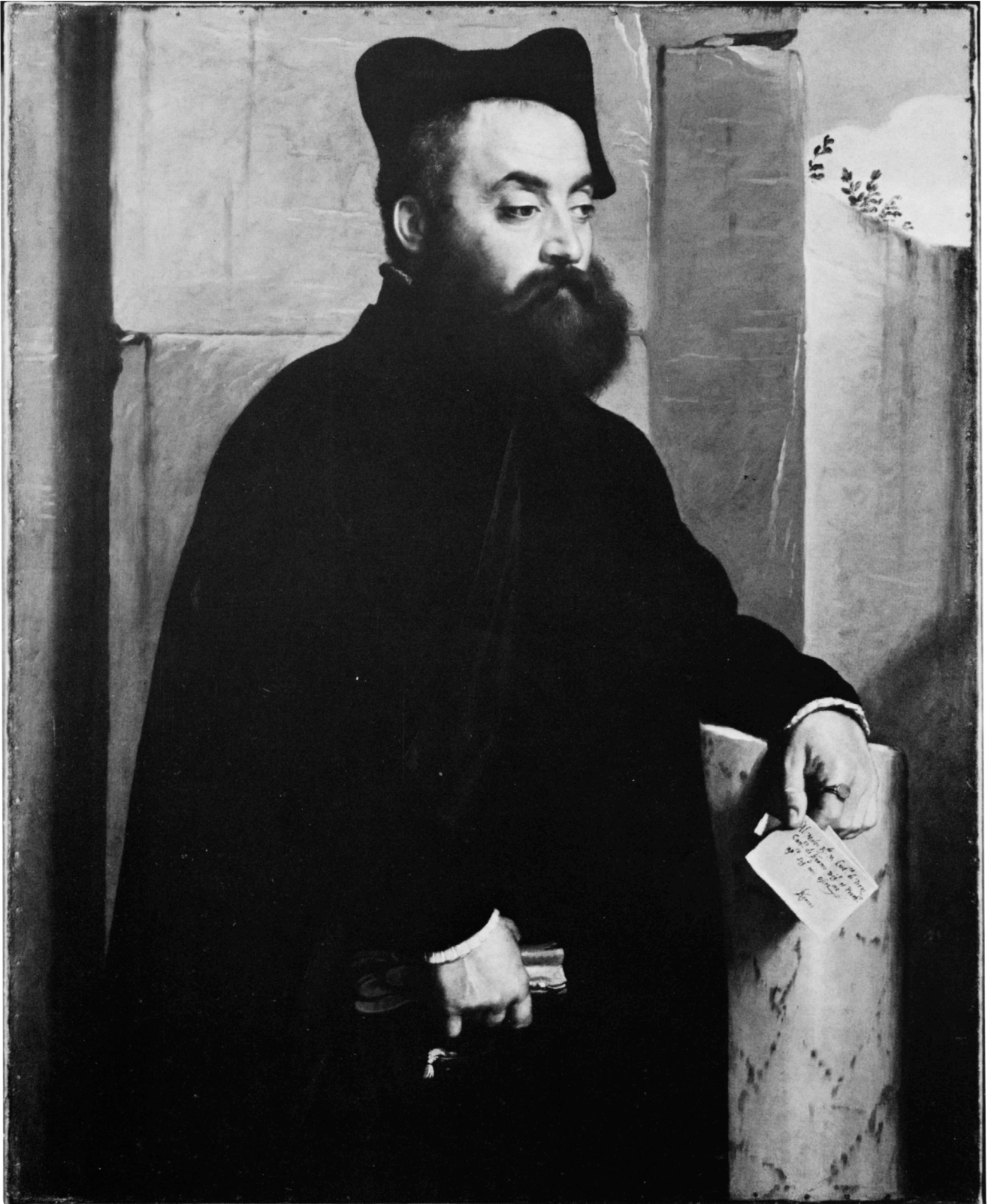


Figure 1 Moroni, *Canon Ludovico di Terzi* (No.1024), shown after treatment.



Figure 2 Raking light photograph before treatment, showing stretcher mark at top edge and general corrugation of paint surface. Corrugation and cracking were especially prominent in the beard and black coat.

achievement of all three was neither desirable nor necessary.

Much attention has been paid to the drawbacks of traditional lining methods [3]. For instance, it has long been pointed out that, despite the apparent ease with which a lining can be removed, impregnation of the whole structure of a painting with adhesives is a fundamentally irreversible process; that certain adhesives can alter drastically the tonal values of certain types of painting; that lining can lead to irrevocable changes in paint texture; and that, at best, the lining process is only a temporary solution, having to be repeated again and again over the centuries with diminishing success. Misgivings such as these and the search for new materials and techniques of lining culminated in the 'Conference on Comparative Lining Techniques' at the National Maritime Museum, Greenwich in April 1974.

It is important, however, to maintain a sense of perspective. It is too easy, given only the disadvantages of traditional lining, to condemn it as wholly bad. But it would be no exaggeration to say that many paintings would not have survived if they had *not* been lined, and that for many damaged paintings already lined there is no acceptable alternative to continued re-lining by similar traditional methods. Yet it is also true that, in the past, lining has been almost indiscriminately applied as a virtually automatic treatment for canvas paintings, perhaps often unnecessarily.

There are a very few paintings that survive unlined from the sixteenth and seventeenth centuries. *Canon Ludovico di Terzi* is one and Velazquez's *Philip IV of Spain in Brown and Silver* (No.1129) and *Juan de Pareja* (Metropolitan Museum, New York) [4] are others. All of them are in exceptional condition, although it has been a matter for speculation whether that is a cause or a consequence of not being lined. In these cases it is possible to envisage advantages to be gained by lining: they are undeniably more fragile as they are and one might make a clear case for it on that ground alone. On *Canon Ludovico di Terzi* the deformations in the paint and support would also be corrected. But lining has been specifically rejected in each case.

The philosophy of modern conservation is one of minimum possible intervention in the structure of a work of art. A work of art is a whole object, a document providing information on its maker and the method of its making. Therefore, a painting cannot be considered just as a paint film, although that is its most important part. It is given essential character by its whole structure: it has a back as well as a front.

Inevitably, though, the need for compromise solutions must arise, and more important parts of a work of art may have to be maintained at the expense of others. In the case of paintings, obviously the paint film must be preserved at all costs, and this has resulted (often necessarily, but sometimes unnecessarily) in radical support treatments. The most extreme is *transfer* where everything is discarded except the paint film itself; although superficially intact (if successfully done), a transferred painting has lost much of its documentary value as a work of art.

To return to the specific topic of lining, it follows from the principle of minimum intervention that the three requirements of lining listed above should be considered independently. Conventional lining, which is a major intervention, should be carried out only if all three requirements are to be met. If a painting can be treated successfully by meeting only one or two of them, then that is enough. It should be stressed that this argument is applied here only to a first lining: some of the same principles can be (and have been) extended to subsequent re-lining, but by then a painting is already changed and the initial premises are different.

Moroni's *Canon Ludovico di Terzi*, examined in the light of the three lining objectives, required treatment in only two respects. It needed the means to be attached to its stretcher (hence the strip-lining, already carried out) and it required the deformations in paint and canvas to be reduced to an acceptable level. The canvas itself was quite strong enough to support the paint (especially in a sheltered museum environment) and the paint itself was quite satisfactorily attached to the canvas.

In practical terms alone, therefore, lining could be avoided. But, as has been shown, the decision not to line a picture is not merely labour-saving; it represents an ethical approach to the work of art as a whole, a determination to preserve, as entirely as possible, the unique structure of the original.

Treatment

The elimination of cupping and buckling in paintings on canvas by vapour treatment on a vacuum hot-table is not new [5,6] but normally it is carried out as a preliminary to lining. To treat an unlined painting of this age is unusual and to refrain from lining it afterwards rather rare.

The principle of the treatment is to expose the back of the canvas to the vapours of solvents (including water) and warmth over a period of some hours, and, when the structure is sufficiently relaxed, to press out the deformations. In order to maintain the canvas and paint in a planar state and prevent the irregularities recurring, it has been customary to carry out some form of lining afterwards, or at least, impregnation of the canvas with some thermoplastic consolidant. In the present case, this step was avoided.

The practical details of the method are as follows. The vacuum hot-table is covered with normal release material (Melinex, Mylar etc) and then with a sheet of perfectly smooth, flat, porous fabric which will act as the solvent carrier. The main property that this material must have, apart from those already mentioned, is that it must be totally inert to the solvents used, reacting neither mechanically nor chemically: paper or linen could not be used, for instance, since they undergo dimensional changes in the presence of moisture. Glass fibre fabrics have been used successfully. The material used in the present treatment was the non-woven polyester sheeting Vilene: preliminary experiments on the vacuum hot-table determined the relative evenness and porosity of

various grades and indicated that type IND 8010 was the most suitable.

The Vilene is sprayed with the chosen solvent mixture — in this case, 75% water, 25% industrial methylated spirits — until it is just damp to the touch and the prepared painting is placed on it face upwards. Immediately around the edges of the painting are placed air carriers (webbing strips) leading to the evacuation ports. Finally, the whole assembly is covered with a membrane (in this case another sheet of Melinex) sealed to the edges of the table. A light vacuum is applied (about the same as for normal lining procedures) and the table heated to about 55°C. Providing the canvas has been correctly prepared, a noticeable reduction in cupping should occur within an hour or two: treatment is continued until it is at an acceptable level. In some cases it has been found necessary to have another layer of porous sheeting above the painting to encourage solvent penetration of the paint layers, which is necessary if the cupping is in the paint alone. In the present case, the deformations were largely in the original canvas and this was allowed to act as its own vapour carrier.

An example of the method is shown in Figs.3-5. *S. George and a Female Saint* ascribed to Palma Vecchio (No.3079) is shown before and after treatment and also during treatment on the hot-table. Raking-light photographs show clearly the overall reduction in cupping and particularly the improvement in specific areas such as the woman's face and neck. This example was not wholly typical since the picture had been transferred rather unevenly from panel to canvas and subsequently lined. Improvement in the surface appearance was restricted by the somewhat lumpy transfer and for this picture it was necessary to carry out re-lining after treatment. Fig.5 shows how easy it is to monitor progress of the treatment visually if a thin shiny upper membrane is used alone; a porous carrier layer placed above the picture makes it less easy.

Moroni's *Canon Ludovico di Terzi* was cleaned before treatment. The paint surface had to be as free as possible from layers of varnish and re-touching to gain the maximum benefit from the treatment. It was found that the Canon's black coat had been substantially overpainted, but was intact underneath; presumably black paint had been rubbed into the cracks and corrugations in an attempt to disguise their disfiguring effect. It was important that all varnish and overpaint should be removed from the cracks so that they could be allowed to close up as the picture became flat. After cleaning, a thin layer of Ketone N Varnish was applied.

While the back of the canvas was being prepared, the front of the picture was faced with Eltoline tissue and a wax – resin – turpentine facing adhesive. As the picture was to be treated face-up all projections on the back of the canvas had to be removed, since under vacuum these would be pressed forward and imprinted into the paint-texture.

First the strip-linings were taken off and as much as possible of the wax – resin adhesive used to fix them was removed, although a residue remained which had stained the canvas. Then any knots or prominent



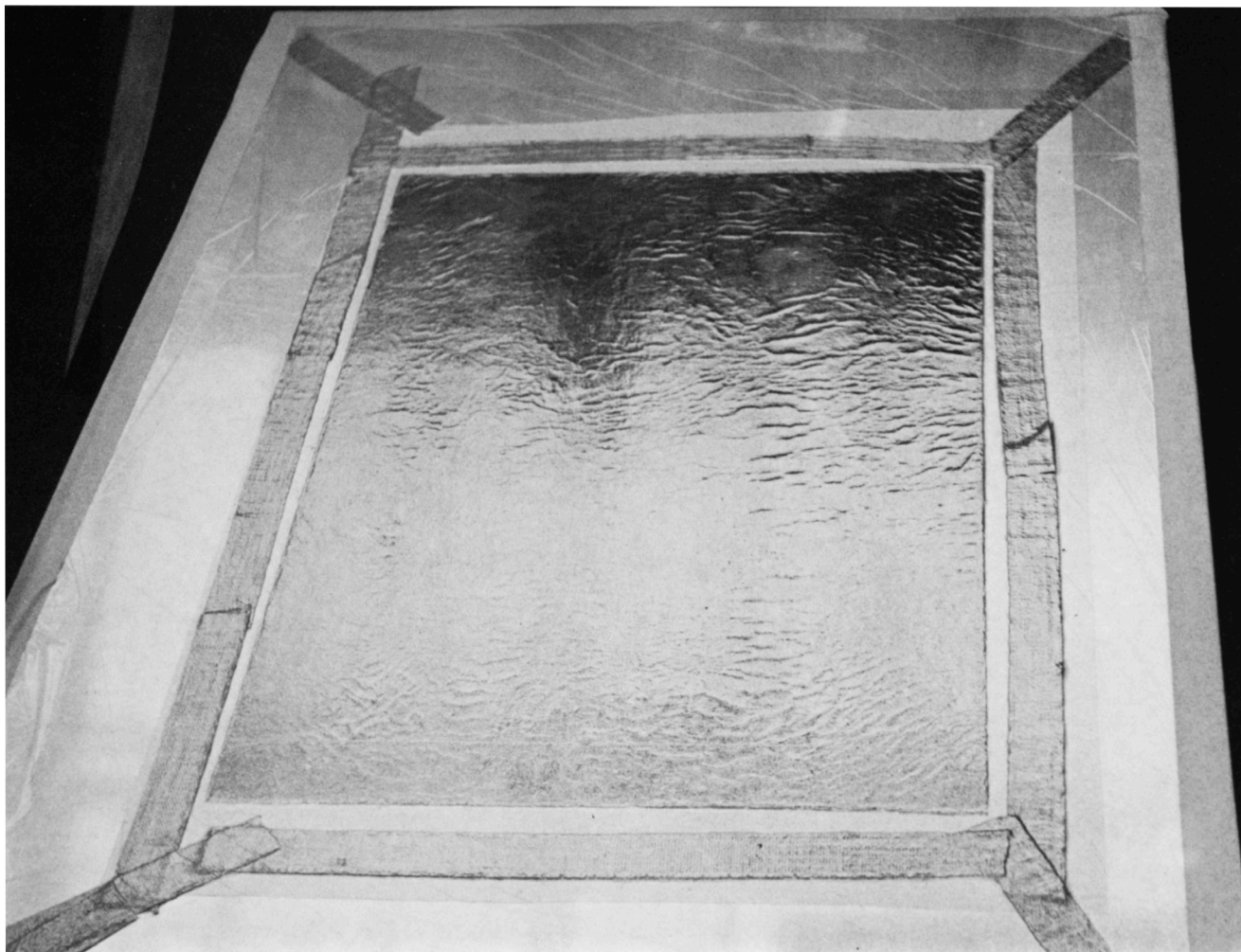


Figure 3
(Left, top)
Ascribed to Palma Vecchio, *S. George and a Female Saint* (No.3079), before treatment. Buckling of paint is most pronounced at the upper left and in the woman's face and neck.

Figure 4
(Left, bottom)
No.3079 after vapour treatment and lining.

Figure 5
(Above)
No.3079 during vapour treatment on vacuum hot-table.

threads in the original canvas were gently scraped with a sharp scalpel until they no longer formed a hard projection. The back of the canvas, taped to a board, is shown in Fig.6. It is possible to see the horizontal corrugation, echoing prominent horizontal lines in the weave. It is also interesting to note that a shadowy reversed image of Canon Ludovico di Terzi himself appears, caused, perhaps, by selective varnishing of the figure alone staining the canvas behind.

The picture was treated by the method already described. For safety's sake, the facing was left on the front until it could be seen how the painting would react, but later it was removed as the treatment would be more effective without it. After a total of about five hours, the surface irregularities had been reduced to an acceptable level, the raised edges of the cracks had been drawn together and the picture was removed from the hot-table. The question had already been considered as to whether any form of impregnation of the back of the canvas should be carried out in order to maintain it in its flat state. But the canvas was fairly thoroughly permeated with old varnish residues soaked in from the front and it was thought that these, which had reformed during the solvent vapour treatment, would act as a sufficient consolidant. Therefore, nothing further was applied.

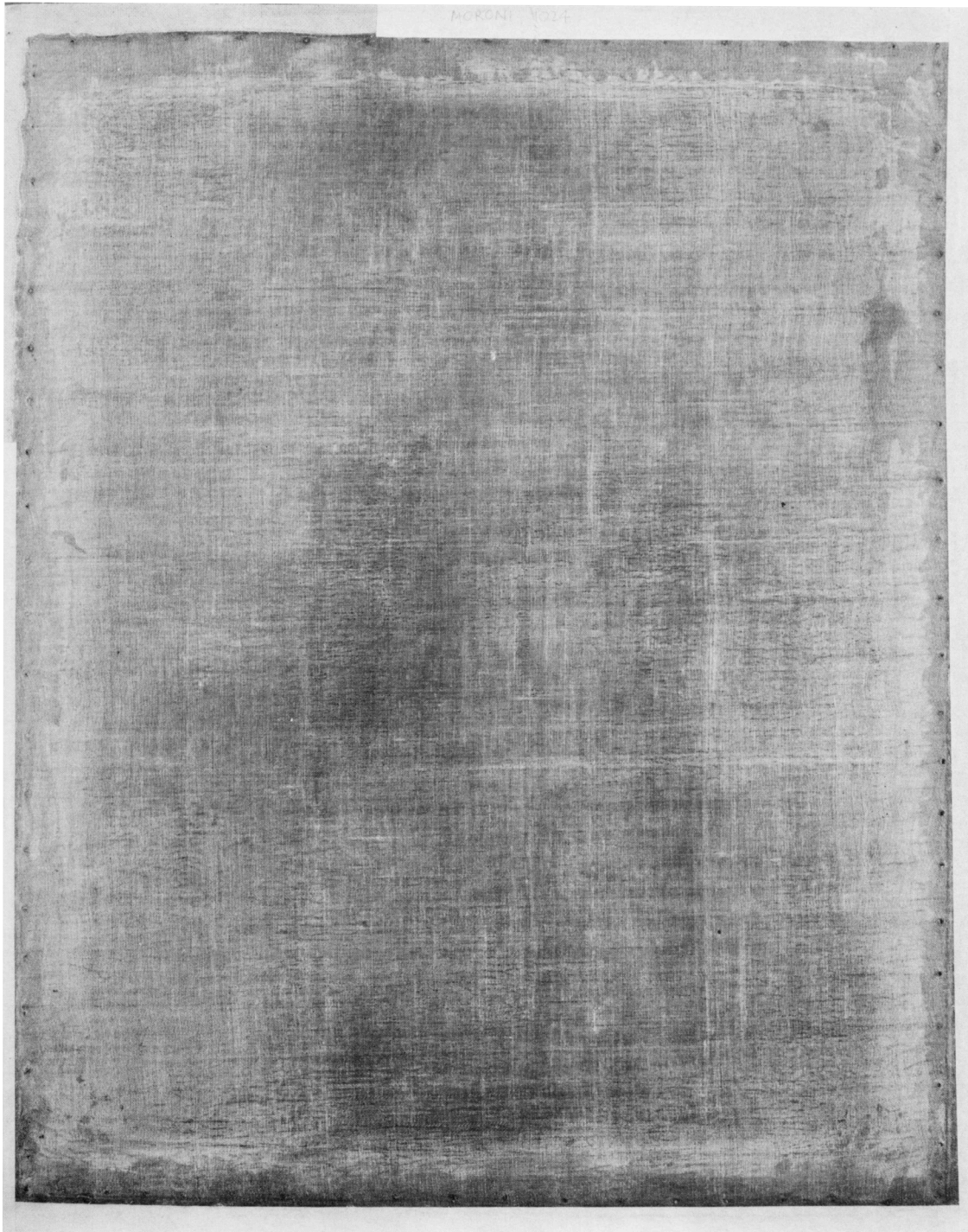
The final stage was the re-attachment of strip-linings. A thin line of wax-resin adhesive was brushed on to the back edges of the canvas

(wax-resin had been used before, and for this reason was chosen again) and feathered strips of fine linen ironed on, overlapping the original canvas by about ½ in. With these, the canvas was mounted on a new stretcher.

Remarks on technique

It should be no surprise that works by Moroni and Velazquez provide examples of unlined pictures. For a painting to survive unlined for three or four centuries, it must either have led a charmed existence or have been very soundly made in the first place. Both Moroni and Velazquez are notable for the soundness of their technique.

The only slight reservation that has been pointed out for Moroni is his unusual habit of nailing his canvas to the front of its stretcher instead of turning it around the side, perhaps indicating (as Allan Braham says [1]) 'a suspicion of provincial carelessness'. That this was his usual practice is clear from a number of pictures, including the *Portrait of a Scholar* in the National Gallery of Scotland [7], in all of which the nail holes have survived at the limits of the original canvas. The absence of any crease or deformation within the rows of holes confirms that they were not turned around the side of the stretcher: indeed, had that been the case, it is most unlikely that they would have been preserved, since conventional tacking margins in pictures of this age rarely survive.



Moroni, *Canon Ludovico di Terzi*, back of canvas after preparation for vapour treatment.

The reason for their survival in so many cases must also, in part, be due to the tightness of Moroni's compositions. He allows very little space between the subject and the edges of the canvas and so restorers would naturally try to retain as much of the original as possible. Some of the portraits have been thought so cramped that they have been later extended with canvas additions, often on all four sides [1,7]. Cleaning of these pictures has revealed the filled nail holes and the true dimensions of the original (Fig.7).

The clearest example of all is *Canon Ludovico di Terzi*. Here there are no additions and the nail holes have never been filled or re-touched. On the back of the canvas the tensions set up in the original stretching

process can be seen clearly (Fig.8). Each nail hole forms a cusp in the regularly distorted threads at each side of the canvas. This distortion is locked into the canvas weave, even when not under tension, and seems to indicate that the canvas was stretched in this manner before priming [8].

There was no question, in the present restoration, of filling or re-touching the nail holes: they were left in their original state, to provide insight into Moroni's working methods. For exhibition purposes, they were simply concealed by the frame.

Moroni's *Canon Ludovico di Terzi* required almost no re-touching: it is undoubtedly one of the best



Figure 7 Moroni, *Portrait of a Man holding a Letter* ('The Lawyer') (No. 742), after cleaning before restoration. There are later additions on all four sides and the original nail holes are clearly visible at the limits of the original canvas.

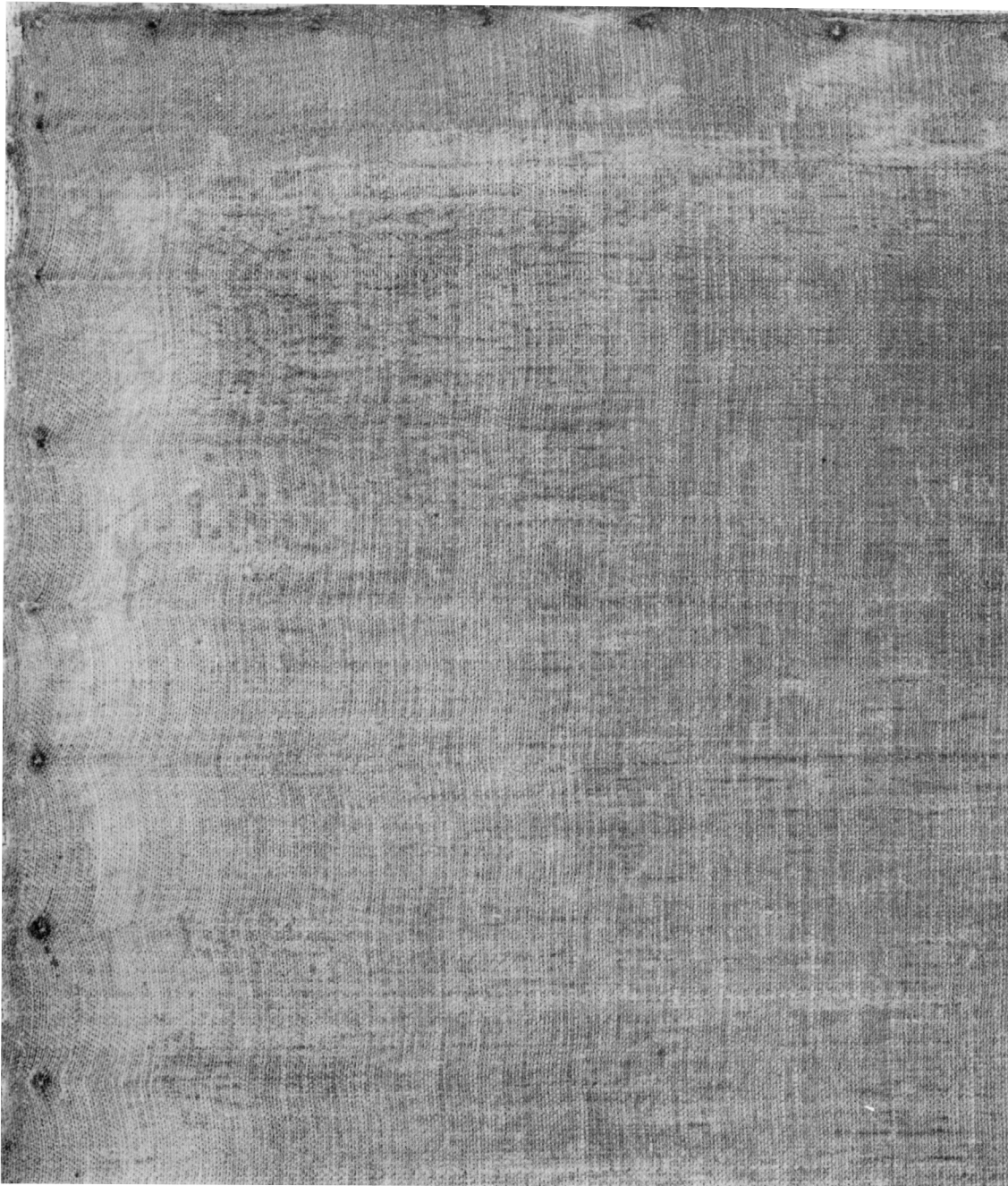


Figure 8
Moroni, *Canon Ludovico di Terzi*,
back of canvas,
detail.

preserved sixteenth-century paintings anywhere. Of that, its continuing unlined state is both cause and effect.

Notes and references

1. BRAHAM, A., 'Giovanni Battista Moroni, 400th Anniversary Exhibition', *Catalogue*, The National Gallery (London 1978).
2. For the clearest historical and critical survey of impregnation and lining techniques, see, PERCIVAL-PRESCOTT, W., 'The Lining Cycle', *Conference on Comparative Lining Techniques* (Greenwich 1974).
3. For example, MAKES, F. and HALLSTRÖM, B., *Remarks on Relining* (Stockholm 1972).
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5. WATHERSTON, M., 'Treatment of Cupped and Cracked Paint Films using Organic Solvents and Water' in N. Brommelle and P. Smith (eds.), *Conservation and Restoration of Pictorial Art* (London 1976).
6. BERGER, G., 'Unconventional Treatments for Unconventional Paintings', *Studies in Conservation*, **21** (1976), pp.115-28.
7. BRIGSTOCKE, H., 'A Moroni Portrait for Edinburgh', *Burlington Magazine*, **CXX** (July 1978), pp.457-61.
8. A view shared by John Dick, Restorer at the National Gallery of Scotland, who cleaned and restored the Edinburgh Moroni.