

2. *The Virgin and Child before a Firescreen*



Artist A follower of Robert CAMPIN (1378/9–1444)

Medium Oil

Support Oak

Size 63.5 x 49.5 cm

Date About 1440

The cleaning of this painting presented particular problems as two sections had been added, probably in the 19th century. However, the cleaning also revealed that alterations had been made to the original picture which subtly changed its meaning.

Robert Campin lived in the Netherlands from c1378–1444. This painting almost certainly dates from the 1440s and is attributed to a follower of Robert Campin: it is very probable that it came from his workshop.

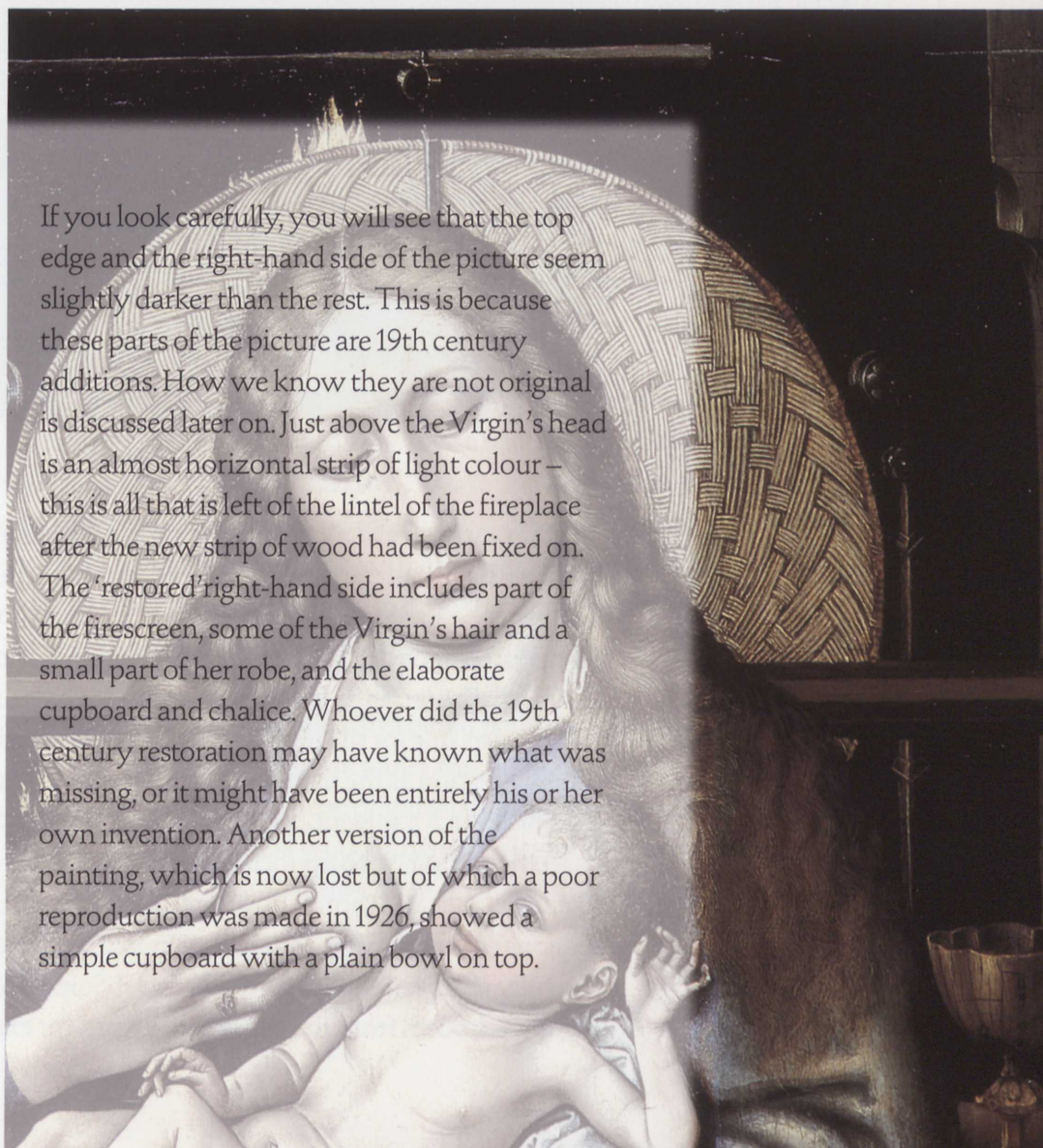
The subject

What seems at first sight to be an ordinary mother and child in a domestic setting turns out to be the Virgin Mary nursing the baby Jesus, the firescreen doubling up as a halo behind the Virgin's head. At the top left, through the open window, is a minutely detailed townscape showing contemporary life in the Netherlands in the 1440s: someone is halfway up a ladder, another person is mending a roof, a horseman trots by.

The picture shows a curious combination of realistic detail within unrealistic space. For example, the observation of the wickerwork of the firescreen, and the handwritten book with its jewelled clasp, are quite breathtaking in their realism – yet overall there are strange anomalies. What is the Virgin sitting on? Could she actually sit in that posture, and would her robes fold and fall like that? Does the book look as though it is really resting on the cushion? And what about the perspective of the tiled floor and the stool on the left-hand side?

Additions

If you look carefully, you will see that the top edge and the right-hand side of the picture seem slightly darker than the rest. This is because these parts of the picture are 19th century additions. How we know they are not original is discussed later on. Just above the Virgin's head is an almost horizontal strip of light colour – this is all that is left of the lintel of the fireplace after the new strip of wood had been fixed on. The 'restored' right-hand side includes part of the firescreen, some of the Virgin's hair and a small part of her robe, and the elaborate cupboard and chalice. Whoever did the 19th century restoration may have known what was missing, or it might have been entirely his or her own invention. Another version of the painting, which is now lost but of which a poor reproduction was made in 1926, showed a simple cupboard with a plain bowl on top.



The painting was acquired by the National Gallery in 1910. It was dirty, the varnish had darkened, and the retouchings of damaged areas on the painting had discoloured. But the decision to restore it was postponed until quite recently because of problems concerning the 19th century additions.



X-ray image

The **X-ray** image of the painting clearly shows not only the later additions but also that a joint plus one major split and some minor ones in the original oak panel had been repaired in the past. All these areas were covered with discoloured retouching. Once it had been decided to keep the 19th century additions, the problem was how to clean the painting. The usual cleaning solvent was fine for the main, older part, but would be a problem for the 19th century section as the paint here was based on a varnish medium and would dissolve if such a solvent came into contact with it. So a complicated water-based surfactant or **soap** formula was worked out by National Gallery scientific staff, and thoroughly tested before being used on the 19th century sections of the painting. Much discoloured paint along the joint and splits was carefully removed using a surgical scalpel. Some tiny flakes of the original paint were taken from the edges of the panel for examination.

What cleaning revealed

General cleaning, plus removal of the darkened **varnish**, immediately revealed many things which had not been seen for generations – such as the individual drops of milk on the bared breast, and the points of yellow flame visible through the weave of the firescreen. The ring and chain for hanging pots above the fire, together with the tiny strip of lintel, emerged



A section of the firescreen

from beneath restorer's overpaint above the Virgin's head, and showed that the 19th century restoration had been incorrect at this point. Most importantly, the genitals of the Infant were found to have been deliberately painted out.

The darker toned paint on the 19th century additions was presumably matched to the already discoloured original paint. It was decided that the modern restoration would be done so that the additions remained fractionally darker. This meant that the whole composition was left intact, but that a careful viewer could spot the difference between the original and later parts.

Examination of paint flakes from damaged areas showed a major change of composition during the painting. In the background of the top half of the painting a red layer (**vermilion**) was found below the visible paint. This was confirmed by X-ray and by studying cross-sections of paint samples. The red goes down to the level of the bench seat, but not behind the Virgin. This suggests that the first idea was to have the Virgin sitting grandly in front of a red or purple **cloth of honour**.

Also, a small area of blistered and pitted paint, looking like a burn mark, was found where the original oak panel and the addition meet just below the Virgin's left cuff. Perhaps the original painting had been damaged in a fire, and the restorer replaced the wood up to the original joint in the panel? If so, the top of the panel may also have been singed and had to be trimmed and replaced.



Taken from the X-ray image

The X-ray image showed up several changes of mind (or **pentimenti**) during painting. The eyes of the Child originally looked up to the bright window and his feet were in a different position. The head, hair, sleeves and cuffs of the Virgin were altered. **Infrared reflectography** revealed that the Virgin's left hand and some drapery originally covered the Child's genitals but these were later moved down by the painter to reveal

them. By concealing this part of the baby at a later date, the original meaning of the painting – that Jesus was born as a normal human boy – was changed. Alterations had also been made to the Child's feet.

Examination of the support, ground and paint layers

By examining the wood grain the wood panel was shown to be oak.

Oak was usually used for panel painting in northern Europe at this time.

The panel was covered with a preparation layer of natural chalk bound with animal glue. This in turn was covered by a very thin brown toning layer.

A staining test showed that this layer contained some protein. The underdrawing was done on this layer with a fluid containing a carbon-based pigment. Some further shading – especially in the deepest shadows of the robe's folds – was done using a dark translucent paint, while light parts – including flesh – had a thin grey underpaint. The Virgin and Child were then modelled in a second underpaint of a browner, warmer tone. The final flesh painting was done in two layers using several pigments, including **lead white**, **vermilion**, various **earths** and a red **lake**.

The distribution of media within these many layers was certainly complicated. Techniques used to identify these included **gas chromatography** linked to **mass spectrometry**, study of individual layers by **Fourier transform infrared spectrometry**, and staining tests for proteins, such as those found in egg. Results showed that the upper layers of paint were bound in **linseed oil**, while **egg tempera** was used in the underlayers for the flesh and robes as well as in the upper layers of the Virgin's flesh. Part of the sleeve in the right-hand addition was found to contain **Prussian blue**, and the golden thread in the hem of the Virgin's robe at the far right was painted with **Naples yellow**. Neither of these pigments was available in the 15th century.

*A colour change
due to exposure to
light*

The cleaning of the painting revealed some horizontal folds in the Virgin's left sleeve at the bottom right of the cuff, which had previously been hidden by restorer's overpaint. It showed that this area of sleeve was more purple than the rest of the robe: evidence that there had been significant colour fading in the drapery.

It seems that the Virgin's robe was originally a purplish-mauve. Analysis of the pigments has shown that the deep purple shadows of the robe contain **ultramarine** with red lake (probably **madder**), while the lighter areas also include lead white; the greyish-green lining of the robe contains **azurite** and lead white.

Cross-section examination of paint samples showed fading of the red lake component of the mixture, leading to two probable changes from the original colour of the robe: an overall lessening of the purplish tone of the robe due to fading of the red lake part of the colour mix, and a greater contrast between light and shade because of the greater loss of colour of the red in the lighter parts of the robe.