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Painting in Antwerp
and London:
Rubens and Van Dyck

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Front cover
Anthony van Dyck, Detail of Lady Thimbelby from *Lady Elizabeth Thimbelby and Dorothy, Viscountess Andover*
(see Plate 34, p. 74).

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Peter Paul Rubens, Detail from 'Peace and War'
(see Plate 1, p. 90).

Rubens's *'Peace and War'*

ASHOK ROY

THE TRADITIONAL title given to Rubens's great allegorical composition in the National Gallery, *'Peace and War'* (NG 46; Plate 1), refers to the purpose of the picture as a gift to Charles I and represents Rubens's aims as envoy of Philip IV of Spain in peace negotiations between England and Spain. The National Gallery Flemish School Catalogue gives the full title as: *Minerva protects Pax from Mars ('Peace and War')*. The picture was painted in 1629–30, most probably towards the end of Rubens's stay in England, from where he returned to Antwerp in March 1630, having been knighted by Charles. The circumstances of the creation of *'Peace and War'*, a detailed description of the subject matter and a hypothetical analysis of the evolution of the composition have been given by Gregory Martin in a full catalogue entry compiled in 1970.¹ In his account, Martin describes the complex make-up of the canvas support, which is discussed in more detail below, and identifies certain of the figures as members of the family of Sir Balthazar Gerbier (1592–1667) with whom Rubens stayed when he was in London.

The subject matter can be described briefly as follows. The helmeted woman at the centre is Minerva and she is pushing away the figure of Mars dressed in armour; the woman to his right is probably a Fury and to her right, in the sky, is a Harpy. The putto in the sky above carries a caduceus and olive wreath referring to peace and harmony. The nude woman at the centre is the goddess Pax; she is feeding from her breast the child Plutus, god of wealth. Martin identifies the boy holding the torch as Hymen, who is crowning the girl shown in profile to suggest that marriage is in accord with the state of peace. The satyr is offering the children a cornucopia of fruit, symbolising plenty. It has been suggested that the satyr and the two women at the left refer to Bacchus's entourage and this would account also for the leopard in the foreground, but the significance of these figures has not been established firmly.

It has not been doubted that the whole

composition is an autograph painting by Rubens, but the complex make-up of the canvas support requires some explanation. *'Peace and War'* was the subject of a preliminary technical investigation in 1969, but because of the presence of an old, thick, heavily discoloured varnish, it was not possible then to evaluate the layer structure of the picture. Subsequently, in 1984–7, the picture was cleaned and restored by Anthony Reeve in the Conservation Department of the National Gallery and this allowed a more searching technical study and some paint analysis to be carried out (see Appendix).² At the same time, a full X-ray mosaic of the painting was made (Fig. 1), which shows something of the structure of the support as well as the ground and paint layers.³

The support for *'Peace and War'* is made up of seven separate pieces of canvas, the largest of which are two central pieces each about 136 cm high, by 99 cm and 114 cm wide, joined vertically, on which the principal sections of the composition are painted: the figures of Minerva, Mars, Pax, Hymen and most of the figure of the satyr with the cornucopia at the left, as well as the children and the foreground putto, all in half-length. The field of the composition is extended on to the additions arranged around the central rectangular pair of joined canvases as shown in the diagram (Fig. 2). This is a slightly modified version of the construction given by Martin, in which was omitted an unrecorded additional join in the right-hand extension, running horizontally about 64 cm from the line of the lower edge.⁴ Thread counts taken from X-ray plates show that the two central canvas pieces have the same weave, while those of the additions differ slightly and are marginally finer.⁵

With an elaborate and complex support such as this, to account for the evolution of the composition becomes a key question. Several possibilities suggest themselves. First, that the support was made up in its entirety as a preliminary to painting, and that the composition was worked up as a whole with the present dimensions and format in Rubens's mind at the outset. Second, that Rubens began the painting on



Plate 1 Peter Paul Rubens, *Minerva protects Pax from Mars* ('Peace and War') (NG 46), 1629–30. Canvas, 203.5 × 298 cm.

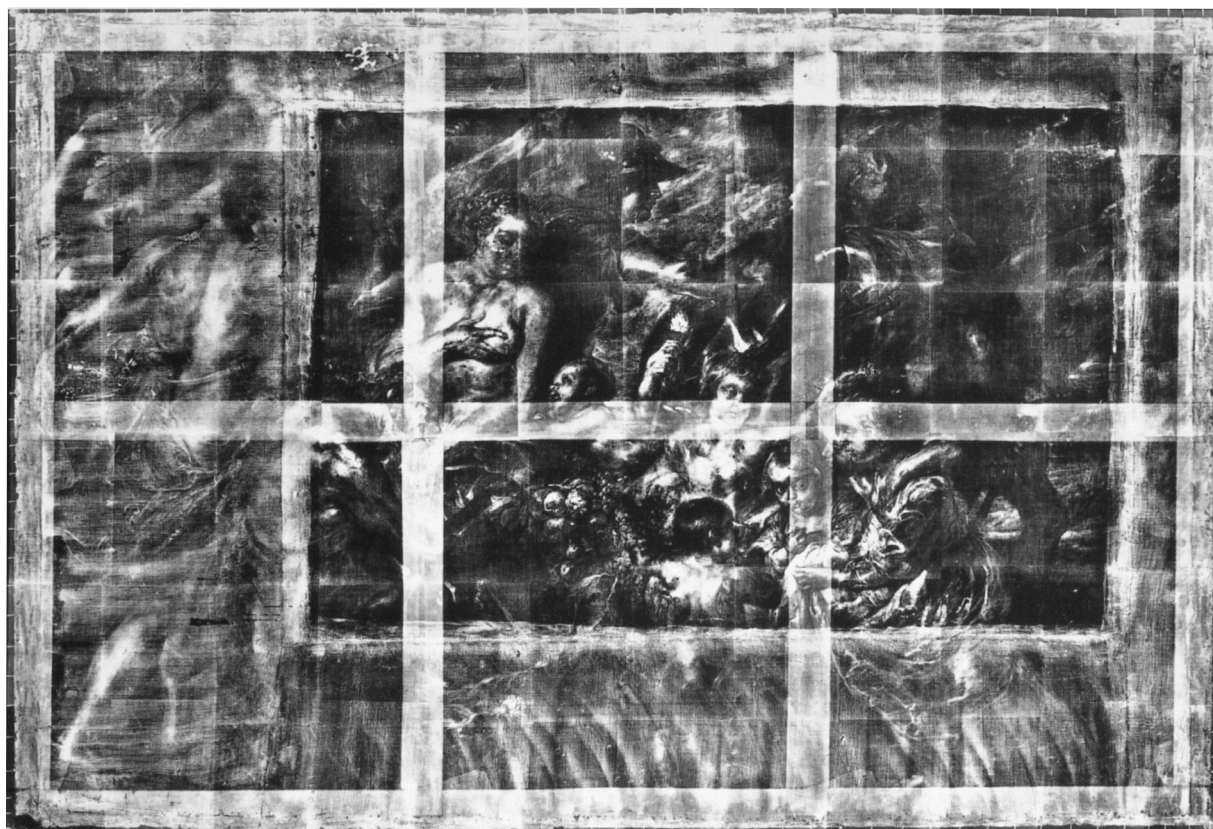


Fig. 1 Rubens, *'Peace and War'*, X-ray composite of the whole.

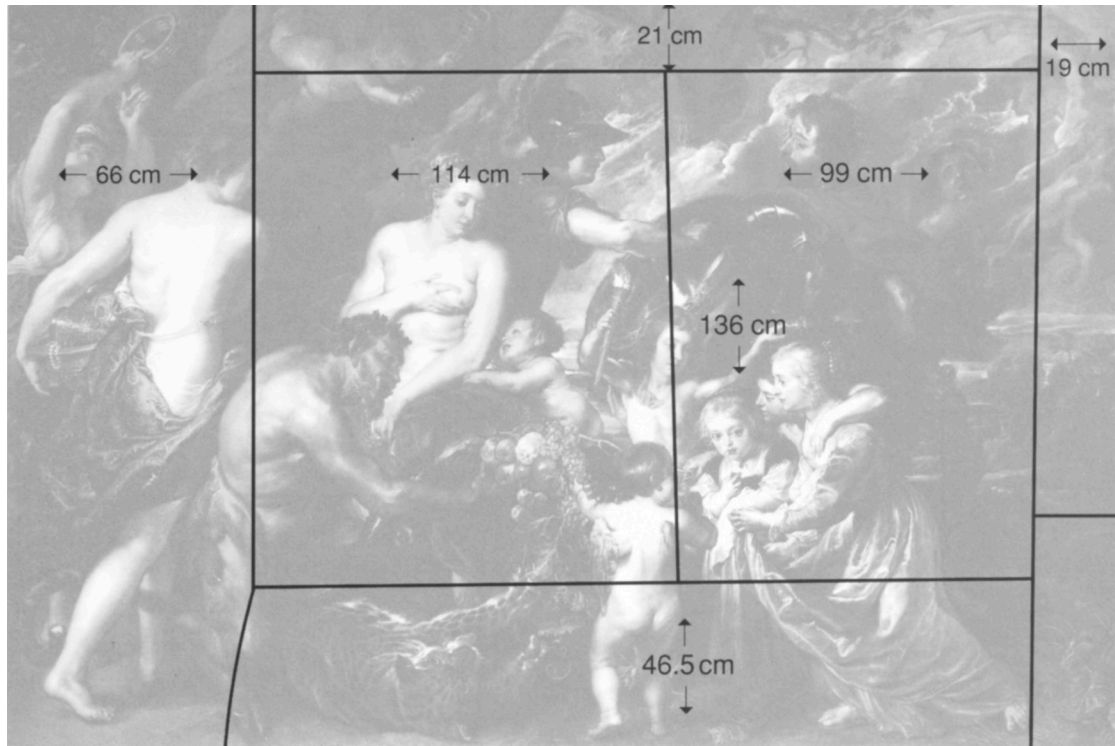


Fig. 2 Rubens, 'Peace and War', diagram showing the construction of the canvas support.

the central rectangular portion of the support, and brought this part of the composition to an advanced degree of finish, or perhaps completed it. The field of the painting was then, it can be hypothesised, extended with new strips of canvas joined to the central pieces and the composition elaborated in the larger format. Third, that Rubens produced a finished independent picture on the central portion, which was subsequently extended and the painted additions completed by another hand. The technical evidence, as well as the provenance of the picture (it was recorded in Charles I's collection in a catalogue of 1637–40),⁶ are against the third course of events, while examination of the support suggests that the first possibility – an initial plan for the painting in its present format – is not the likely explanation. The second possibility, one deduced also by Gregory Martin, although without technical data to support it, appears to be the correct interpretation of Rubens's painting procedure in this case.

During the process of painting it was not uncommon for Rubens to adapt or enlarge the support. In fact, he is known to have adopted this method of working for paintings on both panel and canvas. At least two landscapes on wood panel in the National Gallery Collection, *Peasants with Cattle by a Stream in a Woody Landscape* ('*The Watering*

Place') (NG 4815; c.1620) and *A Landscape with a Shepherd and his Flock* (NG 157; c.1638), show evidence of enlargement of the panel support during the painting process.⁷

However, certain of Rubens's paintings, particularly his landscapes, but other compositions as well, have structurally complex panel supports made up from a large number of elements which were not added in the course of execution, nor as the result of later phases of composition. The large pair of pendant landscapes, painted probably in 1636, *An Autumn Landscape with a View of Het Steen in the Early Morning* (NG 66) and *Landscape with a Rainbow* (London, Wallace Collection) are good examples, and there are others.⁸ The use of supports assembled from a number of separate pieces of canvas in arrangements more complex than simple parallel joins between strips is also known for pictures of this period by other artists, for example Jacob Jordaens's *Portrait of Govaert van Surpele(?) and his Wife* probably of 1636–8 (NG 6293; overall dimensions: 213 × 189 cm), which is made up of six pieces of canvas.

In 'Peace and War' the various sections of canvas are sewn together. The seams, and the threads which make them up, are clearly visible in X-ray photographs (see Fig. 3); the structure of the seams

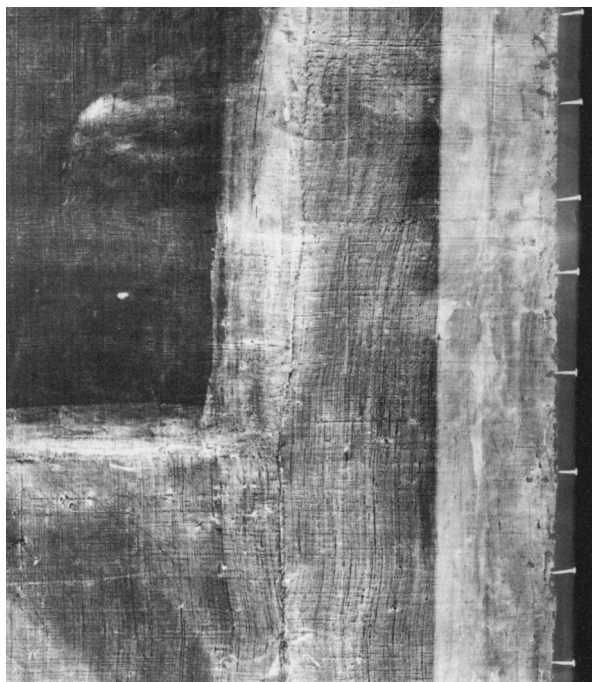


Fig. 3 Rubens, *'Peace and War'*. X-ray detail, lower right corner, showing the seams for the right-hand and lower canvas additions and the overlap of ground layers from the additions to the main field.

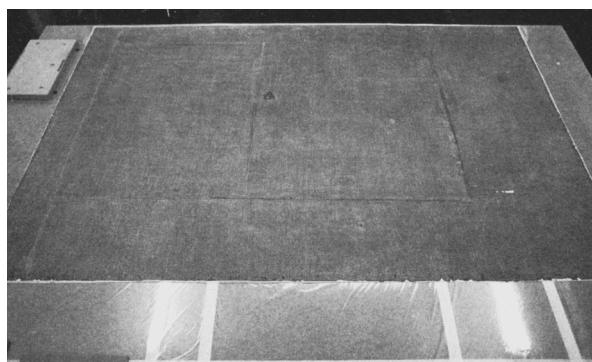


Fig. 4 Rubens, *'Peace and War'*. Reverse of the original canvas assembly, after removal of the old lining canvas, showing the seams.

was evident after the removal of an old lining canvas in 1983. It was evident, also, from the back of the original canvas assembly (Fig. 4), as well as from the X-ray image, that the central two pieces of canvas had been mounted independently on a stretcher or strainer, since the canvas weave is noticeably cusped and distorted around the edges. This observation points to an expansion of the format of the painting from a finished, or largely finished, core, but clearer indications of the correctness of this interpretation arise from the nature and disposition of the ground layers on different parts of the canvas support as

revealed in the X-ray image and by paint cross-sections.

The composite X-ray image of the painting shows considerably greater overall radiographic density on all the canvas additions arranged around the central core (see Figs. 1 and 3). Since there is a relatively unbroken peripheral zone of radio-absorbent material, it must result from greater X-ray density in the grounds on the additions. Cross-sections from the central portion of the picture show that each of the main centre strips of canvas bears the same double ground. This consists of a lower, fairly thick reddish-brown translucent layer composed largely of calcium carbonate tinted with red earth, and over this, a second exceedingly thin upper priming of a warmish mid grey-brown, only just concealing the red-brown layer below (Plate 2). The ground layers on the additions are consistent in constitution from place to place on the structure, and, as on the centre, are made up of a double-layered system. The lower ground on the canvas extensions is a moderately thick layer of earth pigment of a strong mid red-brown and over this there is a substantial upper ground, light beige in colour. This second ground, probably mainly responsible for the radio-absorbency seen in the X-ray image, consists of lead white tinted with a little black pigment (mainly lampblack) and a fine red earth; it also contains occasional clumps of aggregate particles of yellow ochre (Plate 3).⁹ The thickness of this upper ground layer and its particular constitution make it possible to detect and recognise the layer wherever it occurs in paint samples, and the spatial extent of its application is similarly easy to map on the picture and on the X-ray. The X-ray image also shows broad curving marks in this upper ground, suggesting that it was applied with a palette knife.

The band of additional X-ray density imparted by the upper beige ground can be seen to overlap the seams of the additions around the entire profile of the central canvas structure: by about 2–4 cm at top and bottom additions, by 5–7 cm at the junction of the right-hand addition, and by 6–9 cm at the left-hand addition. Cross-sections taken through the full layer structure at these zones of overlap (Plate 4) are therefore crucial in understanding the order of events in the construction of the assembly. Examination of the layer structure at several sample points reveals the following sequence, from the canvas upwards:

1. The double ground present on the centrally joined (core) canvases
2. A layer, or layers, of paint: the pictorial layers of the first, core, stage

3. The upper (beige) ground of the extension strips
4. A second layer or sequence of layers of paint: the present surface paint. In some places, although not everywhere, these correspond to the colours beneath the surface found at 2.

The obvious inference is that the central core composition originally enjoyed an independent existence, on a stretcher or strainer, and had been taken to some degree of completion as a painting. This picture had then been demounted and new canvas sewn around the edges, making use of the turnovers of the central portion to attach the additions. The excess canvas at the back of the seams was trimmed away at some stage, but it is not known when this was done. It remains to be established whether the strips of canvas used to extend the field had the lower red-brown ground in place before these were attached, but the cross-sections seem to suggest that both stages of priming on the additions were carried out after they were in place.¹⁰ The thick, upper beige-coloured ground was evidently applied in a single layer over the lower ground on the additions, and spread across the seams to disguise the joins.

The differences in colour and texture between the grounds on the centre portion and the extended parts have probably become more pronounced with age, and this has resulted in a cooler and flatter look to the composition in the extended areas. These passages are in general freer and more sketchily worked than the tightly focused and highly wrought core composition, and the ground colour influences the tonality at the periphery more than at the centre (Plate 5). It is not clear whether Rubens chose a rather differently coloured ground for the extensions, with the intention of exploiting its tone as part of his plan for the final, enlarged composition. But the differences brought about by ageing and other changes with time have certainly had their effect on the appearance and condition of the different parts of the picture.

Gregory Martin argued that 'Peace and War' had been evolved by Rubens from a central composition, which involved half-length figures of the group of children at the right and the winged putto in the foreground. Support for this theory rested on the existence of several preliminary sketches for the central composition and sketches for individual figures, none of which included full-length studies.¹¹ He also suggested an intermediate stage of the design, worked up as a *modello*, now lost, the composition of which was further altered in the execution of the central part of 'Peace and War'. Whether or not this *modello* existed, it is clear from the number of drawn

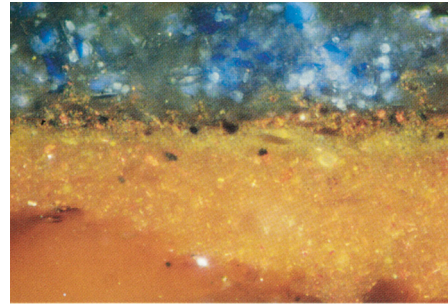


Plate 2 Rubens, 'Peace and War'. Paint cross-section from the brightest blue sky just above Minerva's helmet, from the central part of the composition, consisting of ultramarine over a thin brown underpaint. The double ground on the core canvases consists of a translucent reddish-brown lower layer and a thin warm mid-grey-brown on top. Original magnification 350x; actual magnification 210x.

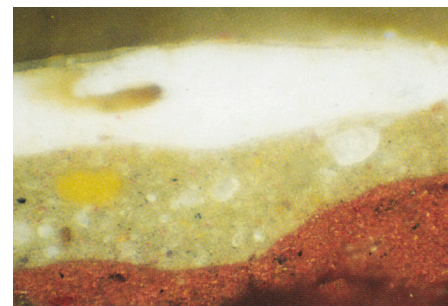


Plate 3 Rubens, 'Peace and War'. Paint cross-section from the upper arm of the woman carrying treasure at the left of the composition. This shows a single layer of flesh paint over the double ground present on the canvas additions. This double ground consists of a mid-red-brown layer of earth pigment and a thick, light beige upper ground layer. Original magnification 275x; actual magnification 165x.

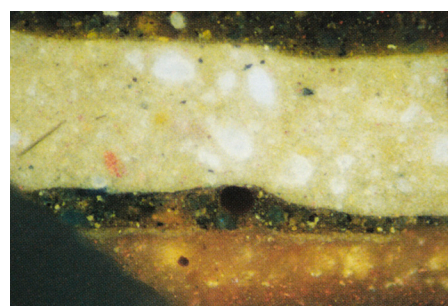


Plate 4 Rubens, 'Peace and War'. Cross-section of dark green landscape a few centimetres to the left of the seam joining the right-hand canvas addition to the main field. The lower double ground of the main field is visible at the base of the sample; there is then a layer of dark blue-green paint representing the initial landscape on the core composition. This is covered by a thick layer of beige upper ground that overlaps the seam from the added strip of canvas at the right. The top dark green layer is the surface landscape paint, concealing the junction. Original magnification 320x; actual magnification 195x.



Plate 5 Rubens, *'Peace and War'*. Detail of the children on the right, showing the junction of the addition and the main field just below the older girl's hands.

studies that Rubens's preparation of the design was careful and considered.

One can conjecture that the success of Rubens's diplomatic mission to England, and the benefits to his reputation and standing which resulted from it, called for a grander and more imposing gesture to the King than Rubens perhaps initially conceived. This would account for the expansion of the format of the painting and the evident haste in which the outer parts of the composition were finished. The paint structures show that the enlarged painting was finished soon after the central core had been painted, and many areas along the joins show brushstrokes and whole passages worked back over the seam on to the main, central field. This is particularly evident in the flesh of the satyr's back, in the orange and gold dress of the girl to the right, particularly in the highlights, and in the smoothly painted shoulder of the woman at the left carrying the bowl of treasure.¹² On a smaller scale, with more attention to detail, similar brushstrokes worked across the joins can be seen in the leopard's claws and in the landscape to the right.

As we have seen, complicated and elaborate supports are common in Rubens's work and it is often difficult to judge whether their enlargement from a central design was projected at an early stage. Although technical evidence seems to support the view that the composition of *'Peace and War'* was elaborated later, it cannot be ruled out that Rubens conceived from the outset the grander, larger composition that we see today, and that his idiosyncratic way of working required two quite distinct stages of design and painting.

Appendix: The materials of *'Peace and War'*

Ground layers

The central joined canvases carry a double ground consisting of a red-brown lower layer of calcium carbonate and a red earth, with a very thin warm mid-grey-brown on top. This upper layer consists of lead white and earth pigments. The canvas strips that extend the field of the central 'core' also carry double grounds. Here the lower layer is a darker red-brown containing red earth and calcium carbonate. A thick grey ground over this consists of lead white, with a little lampblack, coarser black pigment, fine red earth and yellow ochre.

Flesh paints

The system of flesh painting is straightforward. Two layers are evident where Rubens continued to work the paint over the joins in the enlarged composition, for example in the figure of the satyr. The clearest pink tones contain small quantities of vermilion mixed with lead white, while fine

red earth is included for the rather browner half-shadows. Cool shadows result from the addition of small amounts of black pigment, Cassel earth and, occasionally, azurite, to the flesh paints. The yellowest tones contain yellow ochre.

Draperies

Red Minerva's bright red drapery is painted in vermilion with a thin red glaze of a faintly orange-red coloured lake, or mixture of lakes. Mars' duller red drapery also contains vermilion (partially darkened at the surface) over an underpaint of red-brown earth mixed with red lake. Pax's drapery contains a mixture of red lake pigments, possibly madder combined with cochineal.¹³

Lilac The grey-lilac drapery of the bacchante(?) with the tambourine, at the left, consists of a mixture of lead white, charcoal black and red lake pigment. No blue pigment is present.

Yellow and orange The golden-yellow to orange-brown dress, worn by the girl to the right, consists of a combination of opaque and translucent pigments according to colour and shadow value. The palest impasto highlights are pure lead-tin yellow ('type I'), while a more orange colour is imparted by the addition of vermilion. Translucency and darker tones in the shadows result from the use of yellow lake, translucent golden ochre and Cassel earth. (The method of painting and materials are closely similar to those used by Rubens for Delilah's golden drapery in *Samson and Delilah*, NG 6461.¹⁴)

Green The embroidered drapery around the waist of the woman carrying treasure at the left owes its lightest green colours to a combination of lead-tin yellow mixed with white and mineral azurite. The bluest areas consist of azurite scumbled over a solid mid-green underlayer, while

the very deep blue-green shadows contain indigo and charcoal black. In the most translucent deep greens, the paint contains yellow lake in addition to azurite.

Black The deep blue-black of the bodice of the little girl facing out of the composition is painted in a mixture of charcoal black and mineral azurite, with a little added white.

Background setting

The sky contains natural ultramarine (rather blanced), and ultramarine over azurite mixed with white and black occurs in the bluest parts of the distant landscape at the centre of the composition. The dark green foliage at the right is painted in azurite, lead-tin yellow, black and white; dark landscape details at the right consist of azurite, black pigment and yellow lake.

Notes and references

1. G. Martin, *National Gallery Catalogues: Flemish School, 1600–1900*, London 1970, pp. 116–25.
2. 'Peace and War' was relined in 1983 at the time of the conservation treatment. Full details of treatment are recorded in the National Gallery 'Conservation Dossier'. A series of paint samples was taken for microscopical examination and analysis by standard methods in use in the Scientific Department of the National Gallery. These techniques of analysis included optical microscopy of cross-sections and dispersed samples, SEM–EDX, XRD and GC–MS.
3. The full X-ray image of the picture enables the structure of the support and all its joins to be examined. Some earlier X-ray plates had been taken in 1947, but these were too few for the complexity of the support to be assessed.
4. A diagram of the structure of the support is given in an appendix to the Flemish School Catalogue, see G. Martin, cited in note 1. This shows a narrow addition at the right side of the picture joined to a larger additional strip at the right. However, the narrow strip is in fact a crease in the canvas from an old stretcher and a similar crease can be seen at the left side of the picture. The published diagram does not show the horizontal join present in the right-hand addition.
5. The thread count on the central pair of canvases is the same for each – approximately 10 × 10 threads per cm. The weave of the extension strips of canvas is on average 10 × 11 threads per cm.
6. See G. Martin, cited in note 1, p. 117.
7. C. Brown, *Making and Meaning: Rubens's Landscapes*, exh. cat., National Gallery, London 1996, pp. 99–102; see also *idem*, C. Brown and A. Reeve, 'Appendix: The Structure of Rubens's Landscapes', pp. 116–21.
8. C. Brown, cited in note 7, p. 99. A Rubens panel painting in Dresden, *An Old Man with a Brazier*, is painted on an extraordinarily complex assemblage of small pieces of wood, including triangular-shaped joints and inserts. A whole series of these joins is at the centre of the composition, and it is inconceivable that the picture underwent an expansion of the panel from a central core. Similarly, although the support is less elaborate, the National Gallery *Portrait of Susanna Lunden (?) ('Le Chapeau de Paille')* (NG 852) has joins in the panel which pass through the main part of the figure of the sitter. This too is unlikely to have undergone expansion from a smaller format.
9. The upper grey ground on the additions contains scattered clumps of yellow ochre of a strong dark yellow colour which consist of large numbers of fine particles in aggregation. The presence of this pigment enables this ground layer to be recognised readily in samples.
10. Examination of cross-sections taken from the canvas additions shows that the two layers of the double ground are often seen to merge. This implies that the lower ground was still soft, or not fully dried, when the upper layer was applied, and that they were, therefore, probably applied at the same time.
11. G. Martin, cited in note 1, pp. 118–19.
12. Examination of the upper paint layers that traverse the joins in the support shows that Rubens worked back across the composition to unite the central section with the additions. This is particularly evident if the craquelure pattern in the paint that crosses the joins is examined and it is quite clear that these layers have dried, aged and cracked in precisely the same way on each side of the junctions in the support. Examination of the layer structure in the central part of the composition, for example in the flesh of the satyr at the left, shows that Rubens continued to work on the centre after the additions had been applied.
13. J. Kirby and R. White, 'The Identification of Red Lake Pigment Dyestuffs and a Discussion of their Use', *National Gallery Technical Bulletin*, 17, 1996, p. 67; Table 2, p. 73, and note 103, p. 80.
14. See J. Plesters, '“Samson and Delilah”: Rubens and the Art and Craft of Painting on Panel', *National Gallery Technical Bulletin*, 7, 1983, pp. 39–40, 45 and 48–9.