



REPORT ON THE EXAMINATION OF THE PAINTING

CHRIST BLESSING THE CHILDREN

(Canvas, 89.7 x 123 cm, signed with a winged serpent)

The canvas painting *Christ Blessing the Children* was examined in collaboration with the Straus Center for Conservation, Harvard University Art Museums, in 2006. A wide range of sophisticated analytical methods have been applied to determine the materials and techniques used. The investigation included the analysis of documentary sources and the examination of a later copy at Augsburg. Results were compared with the characteristic workshop practices by Lucas Cranach the Elder and Lucas Cranach the Younger. The aim of this study was to gain a deeper understanding of this painting and to find answers to the question whether this painting is a work by Lucas Cranach the Elder, Lucas Cranach the Younger or/and their workshops.

DOCUMENTARY EVIDENCE

Lucas Cranach the Elder painted the subject of *Christ Blessing the Children* in numerous versions between c.1535 and 1550. Today more than twenty five paintings are known¹, and they represent only a small fraction of the works originally produced. The subject was very popular during the Reformation and the examined picture is the only surviving canvas painting.

Until recently, the canvas paintings of Lucas Cranach and his workshop have attracted little attention. The reason is not that textile supports were seldom used, but that these works have been almost entirely lost. However, the ledgers, receipts and letters that remain suggest the importance of canvas painting in Cranach's work: between 1505 and 1553 more than 200

¹ Kolb, K., 'Bestandskatalog der Staatlichen Kunstsammlungen Dresden – Cranach-Werke in der Gemäldegalerie Alte Meister und der Rüstkammer', in H. Marx, I. Mössinger, eds., *Cranach. Gemälde aus Dresden*, exhibition catalogue, Kunstsammlungen Chemnitz, Cologne (2005) 308; Brinkmann, B., and Kemperdick, S., *Deutsche Gemälde im Städel 1500–1550*, Mainz (2005) 226-234.

paintings were listed as being on textile supports.² The knowledge that the invoices are incomplete, as well as a comparison with earlier inventories, makes it clear that these figures represent only a fraction of the original number of works produced over the course of his career at the Wittenberg court.

Surprisingly, so far only one painting on canvas from Cranach the Elder's workshop was known to have survived. This may be the *Cloth of Christ Standing with the Woman at the Well*, referred to in an invoice of 1550/52,³ but due to the large number of pictures produced, it cannot be certainly identified with the surviving picture *Christ and the Woman of Samaria* (FR 366C).

In Cranach's invoices from 1539, 1543 and 1550/52 there are four paintings documented, which depicted *The Gospel, Where the Children Are Carried to Christ*:

1539 October 15

209 gulden 12 gr Lucas Malhern zu Wittenberg uff muntlich ansagen Hanse von Ponikaw camerers vor eczliche arbeit so er meinem gnedigsten hern gemacht, entricht.

...

11 gulden 19 gr vor eine taffeln, das evangelien als man die kinder zum herren bringet.

...

25 gulden vor das grosse tuch daruff stehet wie man die kinder zum herren bringet.

Date: Eilenberg, Mittwoch nach Dionisy.

Loc.: ThHStAW, Ernestinisches Gesamtarchiv (Schuchardt 1851, I, 121–122; Schade 1974, 438, no. 318, Heydenreich 2007, no. 245)

1543 October 25

133 fl 9 gr 2 d Lucas Cranachen, dem maler zu Wittenberg, vor nachvolgende gemachte arbeit nemlichen:

...

17 fl 3 gr ann 15 guldengroschen vor ein tuch, daruff das evangelium gemalet, da man die kinderlein zu Christo treget.

...

Date: Torgau, 1543

Loc.: ThHStAW, Ernestinisches Gesamtarchiv, Reg. Aa. 2975. (Schuchardt 1851, I, 160–162; Scheidig 1953, 171–172, no. 54; Schade 1974, 440, no. 341; Heydenreich 2007, no. 256).

² Heydenreich, G., 'Canvas painting in the workshop of Lucas Cranach the Elder', *Preprints of ICOM Committee for Conservation, 13th Triennial Meeting in Rio de Janeiro, 22–27 September 2002*, London (2002) Vol. 1, 432–438; Heydenreich, G., *Lucas Cranach the Elder: Painting materials, techniques and workshop practice*, Amsterdam 2007.

³ Heydenreich 2007, 451, no. 316.

1550/52

Item was ich sider [seit] der negsten rechenschaf gemacht hab zu Augspurg.

...

Die tucher sein noch zu vor rechen.

...

Das man die kinlein zum heren pringt.

...

Date: no date given, Cranach stayed in Augsburg between 1550 and 1551.

Loc.: ThHStAW, Ernestinisches Gesamtarchiv, Reg. Aa 2975, fol. 19r (cf. Schuchardt 1851, I, 206–207; Scheidig 1953, 177, no. 72; Schade 1974, 444, no. 408, Heydenreich 2007, no. 316)

One of these paintings was a panel and the other three were painted on cloth. The invoice from 1539 refers to a large size canvas and it seems likely that this would describe a bigger painting than the Boston canvas. The invoices from 1543 for 17 *gulden* and 3 *groschen* for *ein tuch, daruff das evangelium gemalet, da man die kinderlein zu Christo treget* and from 1550/52 for the cloth *das man die kinlein zum heren pringt* could in theory refer to the Boston painting. It is interesting to note that Cranach listed the latter painting together with other pictures, which he produced in Augsburg in 1550 and there has been preserved a copy of the Boston painting in Augsburg (see below). However, due to the large number of paintings which have been lost it is impossible to verify, whether the Boston painting is indeed the cloth *Das man die kinlein zum heren pringt* invoiced by Cranach.

What is evident from the invoices is that Lucas Cranach the Elder painted this subject matter between 1539 and 1550 several times both on panel and on cloth. Panels and cloth paintings were commissioned by the court and the price which Cranach charged for the canvas paintings was equivalent to his panel paintings (cf. Heydenreich 2007).

Paintings of *Christ Blessing the Children* were commissioned by the Saxon Elector Johann Friedrich I the Magnanimous. According to an inventory of Schloss Hartenfels at Torgau from the 16th century there were several paintings of *Christ Blessing the Children*. One painting *Wie der Herr Jesus die Kinderlein zu sich kommen heißet* hung in the chamber of the elector and another panel *Ein Taffel, darauff wie Jesus die kleinen Kinderlein zu sich erfordert* was in the *Eckgemach nachm Teich zu*.⁴

Later references

In 1788 the auction house Rost in Leipzig sold a painting *Christus unter den Kindern und Weibern* (Christ among the Children and Women) for 10 Thaler and 13 Groschen.

⁴ Kolb 2005, 306.

The work was described as “*ein vortrefliches Bild von Lucas Cranach, hat einige Risse und ist an der Ecke etwas wenig beschädigt, sonst ist das Bild wohl erhalten, 51 Zoll breit, 30 Zoll hoch, in schw. Rahm mit gold. Leiste*“⁵ The entry does not specify the support of the painting. The description „hat einige Risse“ (has a few tears or splits) may refer to both a canvas or a panel painting. However, the given measurements of 30 x 51 Zoll (c.71 x 120 cm) make clear that this picture is not identical with the Boston painting.

Within this examination there was no information available on the provenance of the Boston painting of *Christ Blessing the Children*. The author was first contacted on this painting by Prof. Rainer Oswald in 1999 and then again by the present owner, Richard Marchese, in 2006.

METHODS OF EXAMINATION AND ANALYSIS

- Examination of the paintings surface with a stereo microscope
- X-ray analysis (Straus Center for Conservation)
- Infrared- Reflectography (Straus Center for Conservation)
- X-ray fluorescence spectroscopy (XRF) at seventeen locations (Straus Center for Conservation)
- Preparation of six cross-sections of paint samples and photographic documentation (examination of samples 1 and 2 by scanning electron microscopy (SEM-EDS). (Straus Center for Conservation)⁶
- Carbon-14 analyses (University of Georgia)⁷

RESULTS

The canvas support

The painting support is a medium weight, plain weave linen canvas whose weave structure is somewhat open. At a later time the painting has been lined to an auxiliary linen canvas but was un-stretched when examined in 2006. The original tacking margins of the painting are trimmed away. Along the edges, most notably along the bottom, left and right a distinct cusping pattern is clearly visible and indicates that although the tacking margin was trimmed in the past, little of the image was lost and the painting is very close to its original dimensions. The distance between the original tacking points was about 7-9 cm.

A similar distance between the tacking points has been documented for example with *Christ and the Woman of Samaria* (c.10 cm) and *Gregor Brück* (c.7-9 cm)

⁵ The Getty Provenance Index Databases 2007 <<http://piweb.getty.edu/cgi-bin/starfinder/9499/collab.txt>> (24.05.2007)

⁶ Analysis Report by Dr. Narayan Khandekar, Senior Conservation Scientist at the Straus Center for Conservation, Harvard University Art Museums, 11 July 2006.

⁷ Radiocarbon Analysis Report by Dr. Douglas K. Dvoracek, The University of Georgia, Center for Applied Isotope Studies, 17 January 2006.

Thread count

The canvas has a thread count of c.12-13 x 13-14 threads per cm² and the thickness of the threads varies significantly (c.0.3 – 1.2 mm). Consequently, the canvas can be described as low quality linen.

The painting *Christ and the Woman of Samaria* (c.1552) has a thread count of 19 to 20 threads per square centimetre. The surviving canvases of Lucas Cranach the Younger are similar, with approximately 16 to 19 threads per square centimetre.⁸

Consequently, all the examined canvas paintings by Lucas Cranach the Elder and the Younger were painted on a canvas of a higher density. However, according to his invoices Lucas Cranach the Elder acquired canvases of different quality from Saxony, Swabia and Switzerland and lower quality canvas (8–15 threads per cm²) was used in the Cranach workshop from c.1508 onwards for covering the joins of wooden panels.⁹

Dating

Two samples of canvas were sent to the Center for Applied Isotope Studies, University of Georgia for carbon-14 analyses.¹⁰ The date for the first sample was returned as 1430+/-20 years. The second was 1270-1400 AD. It is well known that there are some difficulties with the calibration curve for samples from the 15th and 16th century. In light of this, the carbon-14 can be seen as confirmation that this is not new canvas, and not impossible for the anticipated age of the painting.

The ground

The canvas was prepared with an ochre-orange oil based ground layer made up of earth pigment (ochre) with quartz and a little lead white and/or red lead.

To date a ground layer which consists of earth pigments and lead white has not been identified on any canvas or panel painting from the workshop of Lucas Cranach the Elder or the Younger but this may relate to the fact that only a few canvas paintings from the Cranachs have been examined. Panel paintings were prepared consistently in with a white ground; there are only a few exceptions from Cranachs early years, which have been prepared with a reddish ground consisting of red lead, lead white and chalk. The four examined canvas paintings from c.1550, 1557, 1578 received a very thin white ground, possibly applied on a white bleached canvas.¹¹

⁸ Cf. Heydenreich 2007, 243: *Gregor Brück* (1557): 15–16 x 17–18 threads per cm²; *Joachim Ernst von Anhalt and His Wife* (1563): 16–18 x 16–18 threads per cm²; *Elector Johann Friedrich I in Everyday Attire* (1578): 18–19 x 16–18 threads per cm²; *Elector Johann Friedrich I in Armour* (1578): c.19 x 16 threads per cm² (Kolb 2005, 507); *Duke Moritz in Armour* (1578): c.16 x 16 threads per cm² (Kolb 2005, 506).

⁹ Heydenreich 2007, 68.

¹⁰ Radiocarbon Analysis Report by Dr. Douglas K. Dvoracek, The University of Georgia, Center for Applied Isotope Studies, 17 January 2006.

¹¹ Heydenreich, G., 'The colour of canvas: Historical practices of bleaching artists' linen', in T. Doherty, G. Heydenreich, J.H. Townsend, J. Ridge (Hrsg.), *Preparation for painting: the artist's choice and its*

Notably, there are a number of portrait studies on paper by the Cranachs in the collection of the Musée des Beaux-Arts de Reims on which there has been identified a preparatory layer almost identical in composition (ochre and lead white) to the Boston canvas painting¹². All these head studies have been dated between 1530 and 1545.

The underdrawing

By means of Infrared Reflectography there was no underdrawing detectable. Although an underdrawing has been disclosed on a large number of paintings by the Cranachs there are also numerous pictures where it has not been possible to detect any preparatory drawing by means of IRR. This may relate to the use of various drawing media like for example red chalk which cannot be made visible.

The underpainting

Grey underpainting

What is described as a double ground (grey and orange) in the Analytical Report from the Straus Center for Conservation documents probably a grisaille-like underpainting on top of the ochre ground layer.

The greyish layer contains lead white, charcoal and calcite as well as traces of earth pigment. This layer has been identified in all six cross-sections. The ratio between white and black pigments appears to be similar in all the cross-sections, but there are notably differences in thickness. Also, it was observed by microscopical examination of the paintings surface that the appearance of this layer varies in intensity. This may have to do with the varying thickness as well as the varying content of white and black pigment. Most likely this layer was used for the first modelling of light and shade.

Monochrome grey undermodelling is a characteristic but inconsistently applied technique of the Wittenberg court painter. It is used for modelling form and tonal values of individual areas of the composition and in particular passages of blue sky and drapery. Occasionally blue backgrounds have been worked-up on top of monotone grey. According to the available results of analysis, it was only in the 1540s that Cranach changed this practice and began to use *grisaille* as underpaint for all parts of the composition including the flesh painting.

The grey undermodelling usually consists of mixtures of lead white and carbon black of vegetable origin. In this fashion, Cranach produced mainly large format panel or canvas paintings depicting many figures as for example *Christ and the Woman of Samaria* (c.1552).¹³ In order to efficiently rationalise production, a comprehensive tonal underpainting of the

consequences, Contributions to the ICOM-CC Working Group Paintings interim meeting held at the British Museum 31 May-1 June 2007, London, Archetype (2008).

¹² Le Chanu, Eveno, Laboratoire de recherche des musées de France, analysis report No. 3210, unpublished ; cf. Montout, M.-H., *Cranach l'Ancien et le Jeune*, catalogue, Musée des Beaux-Arts de Reims (1994), 14-15 ; Heydenreich 2007, 261.

¹³ FR 412B, 412C, 433 et al.

entire composition replaces the additive technique relying on varying local underpainting, which perhaps evolved from purely practical considerations related to workshop organisation. Under such a system, Cranach could easily supervise and, if necessary, interfere to correct formal and tonal elements of the painting before elaborating them in colour.

Black underpainting

The red draperies were painted completely black before the modelling with red colour was applied. This black layer made up of a fine carbon based pigment covers the grey underpainting.

The use of a fine carbon based black pigment for black underpainting is consistent with the workshop practice of Lucas Cranach the Elder. In contrast to areas of grey underpainting – often mixtures of lead white and carbon black of vegetable origin – carbon black obtained from soot was frequently used.¹⁴ On this soot-black layer, draperies were modelled with bright opaque colours and completed with glazes.

On a few panels, both grey and black underpainting is present. With the advent of *grisaille*-like undermodelling of the entire composition, the monotone black underlayers fell into disuse in the 1540s. Apparently Lucas Cranach the Younger did not prefer this technique. He avoided it after his father's death, if not earlier.

The working-up

The dress of Christ

The dress of Christ shows a complex layer sequence (sample 2). On top of the grey underpainting there is a thin blue-grey layer containing a copper based blue, most likely azurite as well as some lead white, calcite and some charcoal. The modelling was completed with a mixture of smalt (today discoloured) with some vermilion and lead white.

According to present findings, smalt was first used extensively in Lucas Cranach the Younger's workshop, whereas azurite was the predominant pigment in Cranach the Elder's panel paintings. The reason for this could be the cost and difficulty of purchasing high-quality azurite, as well as a general preference for smalt in the second half of the sixteenth century. Smalt was identified by EDX-analysis on the canvas painting *Christ and the Woman of Samaria* (c.1552), on the *Kemberg Altarpiece* (1565)¹⁵, a triptych of the electors (1566?)¹⁶ and on the portrait of Elector Johann Friedrich I (1578), painted on canvas. The pigment was used on its own and in combination with others, for example with red glazes. The red robe of

¹⁴ The term black here describes the appearance under the stereomicroscope. In examinations of cross sections, there were also traces of colouring elements, e.g. copper green, red iron oxide, vermilion and calcium carbonate.

¹⁵ Unpublished report of analysis by the Naturwissenschaftliches Labor der HfBK Dresden (Schramm, H.-P., personal communication).

¹⁶ Eisenach, Wartburg-Stiftung.

Christ on the painting *Christ and the Woman of Samaria* (c.1552, figs 245, 246) was modelled on a grey underpainting with a red lake pigment to which smalt has been added. The smalt gave a more purple colour and at the same time may have acted as a siccativ. The same practice could be determined on a painting by Titian, *Venus and Adonis* (c.1560).¹⁷ It is not impossible that Cranach adopted this practice from Titian whom he met in Augsburg 1550/51.¹⁸ The examined paintings from the Wittenberg workshop reveal that the pigment has been partially or completely discoloured. This discolouration seriously impairs the original colour balance. Backgrounds that were originally blue today appear only grey.

A blackish discolouration of smalt as it appears on *Christ Blessing the Children* has so far not been observed on other paintings.

The red dress of the woman on the left

The red velvet dress of the woman was modelled on top of the black layer with an opaque mixture of vermilion and some red lake (sample 3). It was finally completed with the application of a translucent layer of a red lake, which has been abraded in some parts.

Modelling of red dresses on black underpainting was a common practice in the workshop of Lucas Cranach the Elder for many decades. This technique allowed light and shade to be formed without subtractive colour mixing, thereby reducing the intensity. This sequence of painting was used routinely for red, green or deep purple clothes for at least four decades.

The dress of the woman on the right (behind the little girl)

The folds of the dress were primarily modelled with white and blue pigment (Azurite?) but appear today greenish-grey, which may be the result of some pigment change or a later reworking. By contrast, the folds of the Augsburg copy appear clearly blue and may suggest some colour change.

The brushwork in the white cloth below the child indicates a particular fast working method experienced in handling paint.

Modelling flesh paint

The flesh paint is made up of lead white, vermilion and some yellow earth (there was also detected some copper – possibly Azurite – by XRF). Modelling of light and shadow followed the grey underpainting. The layers of flesh paint are very thin.

Painting hair

¹⁷ Cf. Birkmaier, Wallert, Rothe 1995, 123.

¹⁸ Cf. Schweikhart 1997, 39. De Mayerne (1620) also mentions the practice of adding a little glass to the red lake pigment (*Berger* 1901, 121).

The hair was painted with thin lines of a lead-tin yellow based paint on a brownish undermodelling. The curling hair of Christ on his right shoulder appears to be painted more sophisticated than in other parts and may suggest some division of labour.

Inscription and serpent signature

There is an inscription on top of the figures painted in yellow paint: “VNND SIE BRACHTEN KINDLEIN ZV IM DAS ER SIE ANRVRETE – MARC: AM · X CAP ·“ (And they took children to him, that he touched them. Markus, Chapter 10).

The inscription was painted with lead-tin yellow Type I on the black background (sample 1). Lead-tin yellow Type I was used regularly in the Cranach workshop for such inscriptions. Generally, the use of lead-tin yellow dropped after c.1750 and it was rediscovered in 1941.

The same inscription can be found on other paintings from the Cranach workshop. The spelling of the word “VNND” varies between the different versions. While for example on the Leipzig, Dresden, Hamburg and Lavrik paintings it is written “VND” there is “VNND” on the Naumburg version. Similarly, the spelling of KINDLEIN varies (KINDLIN, KINDLEIN). In relation to the size of the painting the letters of the inscription are rather small and suggest that the painting was designed to be viewed closely.

There are also fragments of a serpent signature at the end of the inscription. The winged serpent was painted in very thin lines of yellow paint. As it is only preserved in fragments and was probably also reworked at a later time it is hardly possible to reconstruct the original shape and to comment on the authenticity. The fragments of the wing suggest that these could be bird’s wings. This could be an indication that the painting was produced no earlier than 1537.

A winged serpent painted in thin lines and possibly with a similar shape is preserved for example with the *Salome* (dated 1537) in the Staatliche Kunstsammlungen Weimar (cf. p. 55, fig.)

The Augsburg copy

There is a painting *Christ Blessing the Children*, attributed to Lucas Cranach the Elder, in the St. Anna Church at Augsburg. Size and composition of this picture are almost identical with the Boston panel. The painting was examined with permission of the Untere Denkmalschutzbehörde, Augsburg, in situ on 4 August 2006.

The Augsburg painting forms today the predella panel of a carved altarpiece from about 1900. Probably, the painting was added to this altarpiece after its completion as the panel is slightly

bigger than the predella box and the frame of the painting covers elements of the carved architecture of the altarpiece. However, there is only an unpainted wooden panel behind *Christ Blessing the Children*, which suggests that the painting was added to the altarpiece possibly soon after its completion.

The support of the painting is a wooden panel (painted surface c.81.2 x 120.2 cm). It consists of three wide boards (c.25–28 cm) joined horizontally. There are several butterfly-keys visible on the front side which have been added before the painting process. The surface of the wood was only roughly planned with a jack plane. On the reverse the joins have been covered with canvas strips and there are also two cross battens on the reverse, which may have been added at a later time. The technical characteristics of the panel differ significantly from other panels produced in the Cranach workshop.

There were no substantial white ground layer and no underdrawing detectable on the Augsburg panel. The style, quality and technique of painting differ from Cranach's paintings. Significant drying cracks, especially in the blue draperies reflect the use unsophisticated handling of paint and have not been detected in this form on any Cranach painting. The embroidery edge on the red dress of the woman in profile was painted in a rather impressionistic approach and this is uncommon for Cranach's works.

The painting is signed with a winged serpent. The shape of the serpent differs significantly from other authentic signatures.

The composition of the Augsburg painting is very similar to the Boston panel. However, if images of the paintings in Augsburg and Boston are superimposed in their original size, the outlines of the heads and details do not fully coincide. Thus, it seems unlikely, that the composition was transferred by tracing.

Significant technical and stylistic differences between the Augsburg painting and authentic works by the Cranachs are confirmation that the Augsburg painting was not produced by Cranach the Elder, Cranach the Younger or the workshop. The Augsburg painting is a copy which was produced after a Cranach painting. Whether it is indeed a direct copy of the Boston canvas is difficult to establish. There may also have been a third painting, which is not known to us. It is, however, an attractive hypothesis that the painting at St. Anna is a copy of Cranach's canvas of the same subject matter which he painted during his stay in Augsburg and invoiced after his return in 1552.

Condition

In the past the painting had been lined to an auxiliary linen canvas.¹⁹ During this process, the original tacking margins of the painting were trimmed away. Along the edges, most notably along the bottom, left and right a distinct cusping pattern is clearly visible and indicates that although the tacking margin was trimmed, little of the image is lost and the painting is very close to its original dimensions.

The painting was rolled and partially flattened in the past resulting in seven vertical creases in the canvas. The creases do not continue through the auxiliary lining fabric and this indicates that this damage occurred before the painting was lined. Paint and ground layer losses are present along vertical crease lines and also in numerous smaller irregular losses that are scattered over the painting surface. In several parts the painting's surface is abraded. In cross-sections it is visible that lead-soap formation (protrusions) in the ground layer had a significant effect on the paint layers and resulted in some paint loss. A very fine network of craquelure is present over much of the paint surface but the paint layers remain stable.

The painting was examined before the major restoration treatment carried out by Gianfranco Pocobene in 2007.

Conclusion

The results of this examination provide a number of arguments that the canvas painting *Christ Blessing the Children* was painted by Lucas Cranach the Elder with workshop assistance between c.1540 and 1550. Thus, the picture is apparently one of only two surviving examples of canvas painting by Cranach the Elder. Canvas paintings were in fashion at the time and very popular with the Saxon court, valued for their specific optical and technical characteristics. According to written evidence Cranach painted *Christ Blessing the Children* several times on canvas. Probably the less ostentatious surface achieved with paint on canvas was even more in keeping with the changing perception of religious devotion brought about with the Reformation.

¹⁹ Gianfranco Pocobene, Condition Report and Treatment Proposal, undated.