

Report on the examination of the painting

Landscape of Tiraspol (1905)

by Natalia Goncharova

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Report editors: Jilleen Nadolny, Petra Mandt

Location and date of the report: Museum Ludwig, Cologne, May 2018

1. Identification of the artwork

object type:	painting
genre:	canvas painting
title(s):	<i>Landscape of Tiraspol (Landschaft von Tiraspol)</i>
artist:	Goncharova, Natalia (1881-1962) variations in spelling: Gontscharowa, Natalia Gontscharowa, Natalija Ssergejewna Gontcharova, Nathalie Goncarova, Natalija Sergeevna
signed:	n. a.
date of object:	1905 (as given in the museum files)
inventory number:	ML 01483
owner:	Museum Ludwig, Cologne Donation of Peter and Irene Ludwig (Ludwig Collection)
location:	Museum Ludwig, Cologne
material/ technique: description in catalogues and museums files:	Oil on canvas
size of object without frame (height x width x depth):	70,5 x 89,0 x 2,0 cm

2. Technical investigation

Methods of examination:

The investigation of the painting *Landscape of Tiraspol* was carried out in March 2017 by Verena Franken and it contained the examination of the artwork with the naked eye as well as with a stereomicroscope¹ in different light sources (incident light, raking light, transmitted light, reflective light). In addition, results of investigation under ultraviolet light (UV) are considered in the following text.

2.1 Canvas support

The selvage is preserved at the bottom and top edge of the canvas (see lower and upper tacking margin, see Figs. 1 and 2). Thus, warp and weft directions can be determined unambiguously. The warp runs in horizontal direction parallel to the selvedge edge. The weft runs at right angles to the warp respectively to the selvedge edge. In addition, in vertical direction the maximum size of the fabric (as it was purchased) can be determined: It is approx. 73,5 cm. The type of textile weave is a tabby weave with two threads in horizontal and one thread in vertical direction. At top and bottom of the left and right tacking margin² dark coloured threads are visible which have a decorative character (see Figs. 3 and 4). The set of threads runs in horizontal direction (warp) over the painting's surface. These threads are covered at the front side by the paint layer and at the reverse by the upper and lower stretcher bar.

The canvas threads are slubby and irregular. Some thicker threads are present especially in vertical but also in horizontal direction (see Figs. 5, 6). The weave is quite open with variable thickness in both vertical and horizontal yarns, ranging from 0,3-2,3 mm (vertical), 0,3-2,3 mm (horizontal). There is a z-twist in warp and weft (see also canvas structure analysis).

The inscriptions can be divided. Since 1915 Goncharova and Larionov lived in France, leaving a greater part of their works in Moscow. The inscription "Larionow" was purportedly done by L.F.Zhegin (1892-1969) before sending the painting from Moscow to Paris during 1925-27.³ It was written in a blue tone. The name "Larionow" acts here as the addressee and not as an attribution for the painting. Below this inscription number "52", written in a greyish tone (possibly done with grease crayon) is visible.

Except main works a lot of these paintings which had been sent from Moscow to Paris remain packed and un-stretched in the studio in Paris.

At a later date the inscription "Larionow" was crossed out, done in a dark red tone (possibly with a red felt tip pen) and the artists name, title and size (N.G. Paysage 70 x 88,5) was

¹ Type: 308795, firm: Wild Heerbrugg, magnification: x 10-40.

² Localisation of these areas:

1. right tacking margin, bottom: 1,5 cm from the lower corner,
2. right tacking margin, top: 2,0 cm from the upper corner,
3. left tacking margin, bottom: 2,5 cm from the lower corner,
4. left tacking margin, top: 1,8 cm from the upper corner.

added. The number “585”, also done in a dark red tone, is now covered by one of the stretcher bars. This could indicate that these inscriptions were possibly done before re stretching the canvas.

2.2 Stretching

The current stretcher on which the painting is mounted is not original. The canvas has been re-affixed onto a new stretcher. The current stretching represents the second stretching of the canvas but it is oriented largely to the attachment points of the first stretching. It is supposed that most of the current fastening points correspond to the original stretching (see Fig. 1). In addition, there are few small holes in the canvas at the tacking margins with associated traces of red corrosion (see Figs. 2, 3). These holes are related to the original stretching which were not re-used for the second stretching.

There is no evidence that the position of the tacking edge was changed. As a selvage is present at the bottom and top edge and as the cutting edges are slightly frayed at the right and left tacking margin there is no evidence that the size of the fabric was reduced.

Totally 97 non-original round-headed tacks of the same type and size (diameter of tack head: approx. 5 mm) were used as the current fastening material mounted at the tacking margins. These tacks were fastened in non-primed and non-painted areas of the tacking margins. They were used in fastening intervals of 2,0-5,0 cm, predominately 3,5 cm spacing. The position of cusping corresponds to the position of the actual fastening points (especially visible at the left lower tacking margin). Additionally, two non-original staples were mounted at the left and right upper part⁴ of the tacking margins. In addition, there are several holes in the canvas support with corresponding holes in the stretcher bars. These holes at the tacking margin are related to the current framing of the painting. They are used to mount non-original strips of wood at the tacking margins.

It is supposed that the painting *Landscape of Tiraspol* was stored rolled up for a while. This suggestion is evaluated by the presence of many fracture patterns. They are only present in vertical direction indicating that the painting was rolled breadthways.

2.3 Stretcher

It is supposed that the current stretcher is non-original. There is no evidence for its type (stretcher or strainer) and size (for example no stretch marks are discernible).

The actual adjustable stretcher without centre-bar and with eight expansion keys (all keys are present) does not look like a stretcher manufactured at the beginning of the 20th century. Evaluated relating to the stretcher's new appearance and very good condition without traces of use it is obvious that it is not the original stretcher. Additionally, no labels from former exhibitions and no inscriptions are present on the reverse. Its measures 80,0 x 95,5 x 2,0 cm and all stretcher bars have a width of 7 cm. It appears to be composed of softwood (possibly spruce or fir). The stretcher bars are mitred at the corners. They are fastened by mortise-and-tenon joints and are chamfered regularly to prevent contact with fabric. The high degree of

⁴ Localisation is considered from the reverse of the painting.

finish and regularity with plane marks left by manufacture process suggests that the stretcher is machine-made.

2.4 Sizing and ground layer

No sizing was detected with optical microscopic investigation. The off-white ground layer was probably hand-prepared. There is no evidence for commercial pre-priming because the ground was not applied up to the cutting edge (see Fig. 1) and as there are slight differences in the thickness of the layer. It does not fill all the pores. The tops of the threads are scarcely covered by the ground. Thus, the canvas structure is still discernible (see Fig. 9). At the edges and occasionally within painted areas the ground particularly was left free (see Fig. 10). Microscopic examination reveals that the ground is very granular containing variously sized particles (see Fig. 11). There is a similar granular priming noticed for the painting *Still Life with Tiger Skin* (see examination report on *Still Life with Tiger Skin*). Especially large white particles and occasional small proportions of relative fine black particles are noticed in the ground layer. These white particles are visible even with the naked eye. The ground seems to be relative brittle and to have a relative low proportion of binding medium. As no water and alcohol sensitivity was detected⁵ the ground possibly might contain oil or a medium containing oil. Viewed under ultraviolet light the ground exhibits a relative significant fluorescence of white-bluish colour.

2.4 Underdrawing

Neither with macroscopic nor microscopic investigation the presence of an underdrawing work was detected. Even with a magnification of x 40 no underdrawing was revealed. Possibly Goncharova worked directly without underdrawing because paints were applied relative quickly. Further information might be given with hyperspectral imaging.

2.5 Paint layer

The entire surface of the painting was used for colour application. The colours are applied with brush⁶ always up to the turnover edge; rarely also a few millimetres on the tacking margins (see Fig. 12). In some parts of the tacking margin marks of paint material are noticed which possibly occurred during or after paint application by the artist (see Fig. 1). Surface structure, slight differences in gloss, application of paint and non-water-sensitivity⁷ suggest the artist's use of oil paint as paint material. Microscopic examination reveals that a broad colour palette was utilised a (white, yellow, orange/red, rose, purple, blue, green, brown, black tones). It is obvious that the artist mixed different shades of blue and green paints on the palette. Visual microscopic inspection revealed that the paint layer often contains coarse particles. Additionally, the granular structure of the ground is visible through the paint layer (see Figs. 13, 14).

⁵ Water and alcohol solubility was tested at the edge of the painting in three areas (magnification of x 40).

⁶ A few hairs of paint brushes are embedded in the paint layer related to paint application by the artist.

⁷ Solubility of the paint layer according to water, alcohol and white spirit was tested in areas of yellow, blue, green and black paint (magnification of x 40). No water and alcohol solubility was detected and only a slight solubility of green and black paint when white spirit was tested.

The thickness of the paint layer varies between smooth and impasto applications. There are opaque, smooth layers filling most pores on the one hand and thicker layers with more body as well as some areas with relief-like impasto on the other. Especially the figures and a shape in the left lower background were painted with impasto and particularly with relief-like character (see Figs. 15, 16). In some parts colours have been applied so thinly that the structure of the canvas is clearly discernible (see Fig. 17). Especially in areas with thin paint layers tones were mixed homogeneously. At the edges and within painted areas there are a few unpainted areas leaving the ground exposed.

Paints were applied in wet-on-dry and wet-on-wet but also in wet-in-wet technique. The paints of a tree motif were applied to the already thoroughly dry layer of the blue sky (see Fig. 18). Especially in areas with impasto paints of various tones were applied wet-in-wet. Paints of different colours were taken up by the brush undulated and in parts blend when the brush is applied to the canvas (see Figs. 19, 20).

In many areas brushwork is apparent. The structure and shape of the brushwork is often oriented to the shape of the respective motif or painted area. Especially in the top area of the blue sky paint application was done with dynamic brushwork. Impressions of the brush are of a curved pattern which looks wavy and arc-shaped (see Fig. 21). In parts a slight relief-like character is discernible (see Fig. 22). In some areas significant undulated brush strokes were applied without mixing colours homogeneously on the palette (see Figs. 23, 24). In a few parts there is a slightly stippled texture of brush strokes (see Fig. 26). Particularly there is the use of undiluted paint and a hard application with the brush (see Fig. 25).

In the bottom area there are a few thin strings of white and green paint lying on the light rose paint layer (see Fig. 27). Generally paint application was done relative quickly and rapidly. The artist used dark tones (black, dark blue, dark green) to outline shapes and motifs. Colour fields are delineated from one another by contours. Mostly outlining was applied as last step. Especially in the left part of the painting the artist rendered green colour fields like spaces of lawns in dark tones. In these areas outlining was done as last step, too (see Figs. 29, 30).

At the left lower edge a thin and smooth green layer was painted firstly. Afterwards a shape in rose tone was done by the artist. On the wet rose paint layer outlining was applied as last step (see Fig. 31).

Often spaces were filled firstly out and afterward the artist placed details (trees, figures), colour accents and highlights as last step (see Figs. 15, 18 and 33). On a thin green paint layer different tones (white, light yellow, red, blue, black) were applied as impastos in wet-on-wet technique showing human beings (see Fig. 15). In the centre of the painting a smooth and dark green paint layer was filled out as first step and then details and colour accents were placed in different tones (black, white and pink). Predominantly lines in vertical direction were utilised to highlight parts of the green space (see Fig. 32).

The painting is not signed by the artist. No major revisions or changes are visible in the composition in normal conditions or under magnification.

2.6 Varnish

The painting is not varnished. Neither the macroscopic and microscopic investigation nor the examination under ultraviolet light gave evidence for the presence of a varnish layer. There is no evidence for a former removal of varnish (no residues of varnish in depths of the paint layer, no structural change of the paint layer caused by swelling and no overcleaning of the paint layer).

2.7 Frame

The existent frame is not authentic.

3. Photographic documentation

Technical aspects



Figures 1 and 2: *Landscape of Tiraspol*, details macro, upper (Fig. 1) and lower (Fig. 2) tacking margin, incident light. The selvage is preserved at the top and bottom edge of the canvas.



Figures 3 and 4: *Landscape of Tiraspol*, details macro, right (Fig. 3) and left (Fig. 4) tacking margin, incident light. The type of textile weave is a tabby weave with two threads in horizontal and one thread in vertical direction.



Figures 5 and 6: *Landscape of Tiraspol*, details macro, reverse, raking light (Fig. 5) and incident light (Fig. 6). The canvas threads are slubby and irregular. Some thicker threads are present especially in vertical but also in horizontal direction.



Figure 7: *Landscape of Tiraspol*, detail macro, reverse, incident light. A small fragment of plant husk is noticed in the vertical direction of the weave (see red arrow).

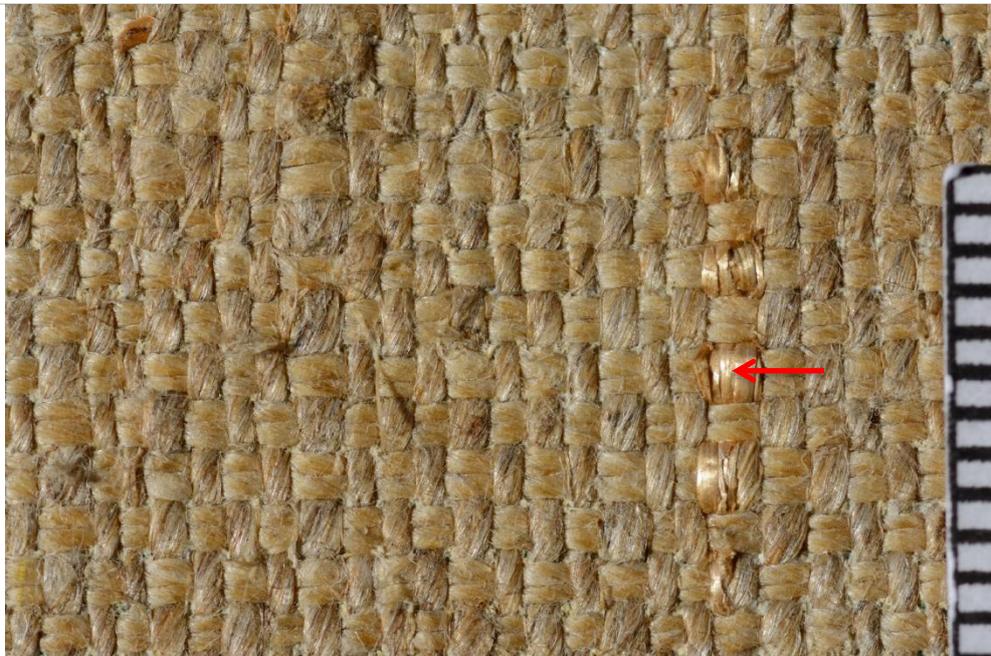
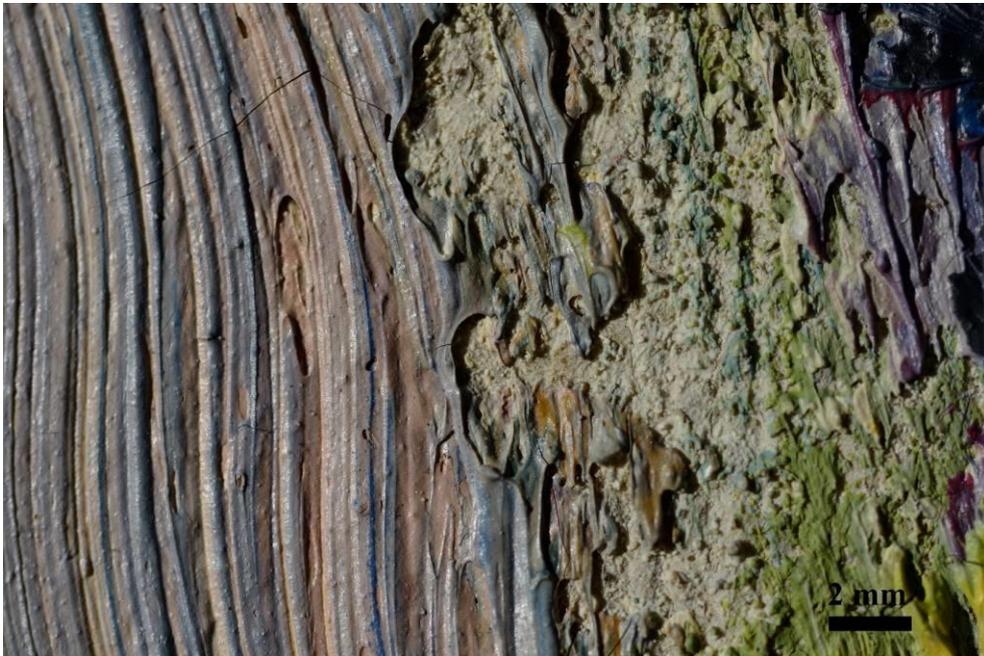


Figure 8: *Landscape of Tiraspol*, detail macro, reverse, incident light. A thread in vertical direction has a glossier surface which again relates to the inclusion of husk material (see red arrow).

localisation of Figures 9 and 10



Figures 9 and 10: *Landscape of Tiraspol*, details macro, lower edge, incident light (Fig. 9) and right lower edge, raking light (Fig. 10). The ground is a thin layer which does not fill all the pores. At the edges and occasionally within painted areas there are some small absences of oil colour where the ground is visible.

localisation of Figure 11



Figure 11: *Landscape of Tiraspol*, microscopic photograph, x 20, lower edge, incident light. Microscopic examination reveals that the ground is very granular containing variously sized particles.



Figure 12: *Landscape of Tiraspol*, detail macro, lower tacking margin, incident light.

localisation of Figure 13



Figure 13: *Landscape of Tiraspol*, detail macro, right lower edge, raking light. The granular structure of the ground is visible through the paint layer. As a first step the light green layer was painted. Afterwards the dark green layer was done. As last step the black contour was applied in wet-on-wet technique.

localisation of Figure 14



Figure 14: *Landscape of Tiraspol*, microscopic photograph, x 10, lower left edge, raking light. A coarse-grained structure of the relatively thin paint layer is visible.

localisation of Figures 15 and 16



Figure 15 and Figure 16: *Landscape of Tiraspol*, details macro, raking light, figures in the left upper part (Fig. 15) and area at the left lower edge (Fig. 16). Some areas were painted with impasto and relief-like character. On a thin green paint layer different tones (white, light yellow, red, blue, black) were applied as impastos in wet-on-wet technique (see Fig. 15). On another green layer white and black tones were painted with brushwork, in places with relief-like surface structure (see Fig. 16).

localisation of Figure 17



Figure 17: *Landscape of Tiraspol*, microscopic photograph, x 6.3, left lower part, raking light. The green paint was applied as a smooth, thin layer. Thus, the structure of the weave is clearly discernible.

localisation of Figure 18

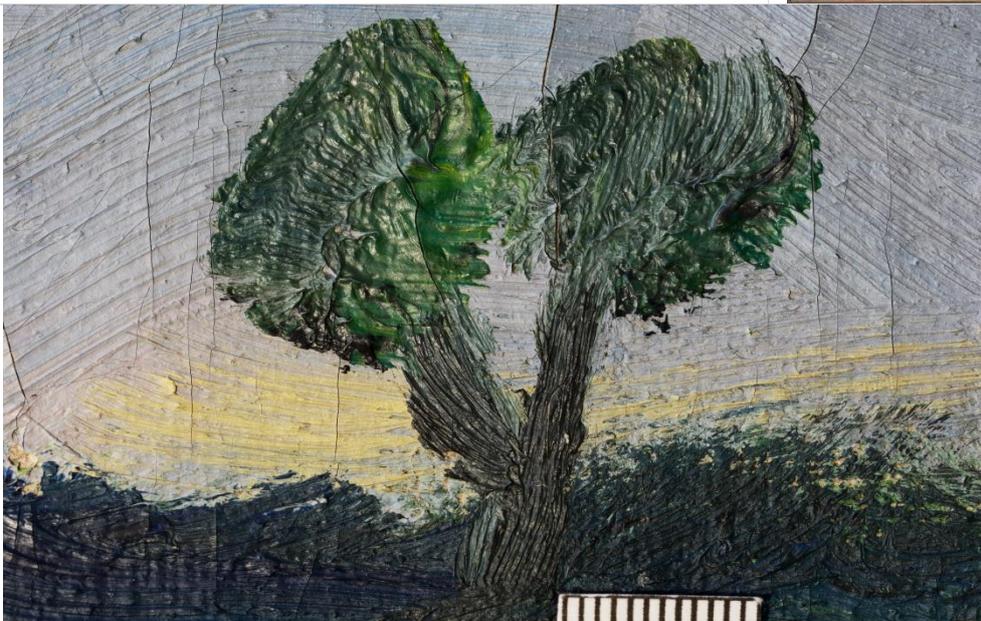
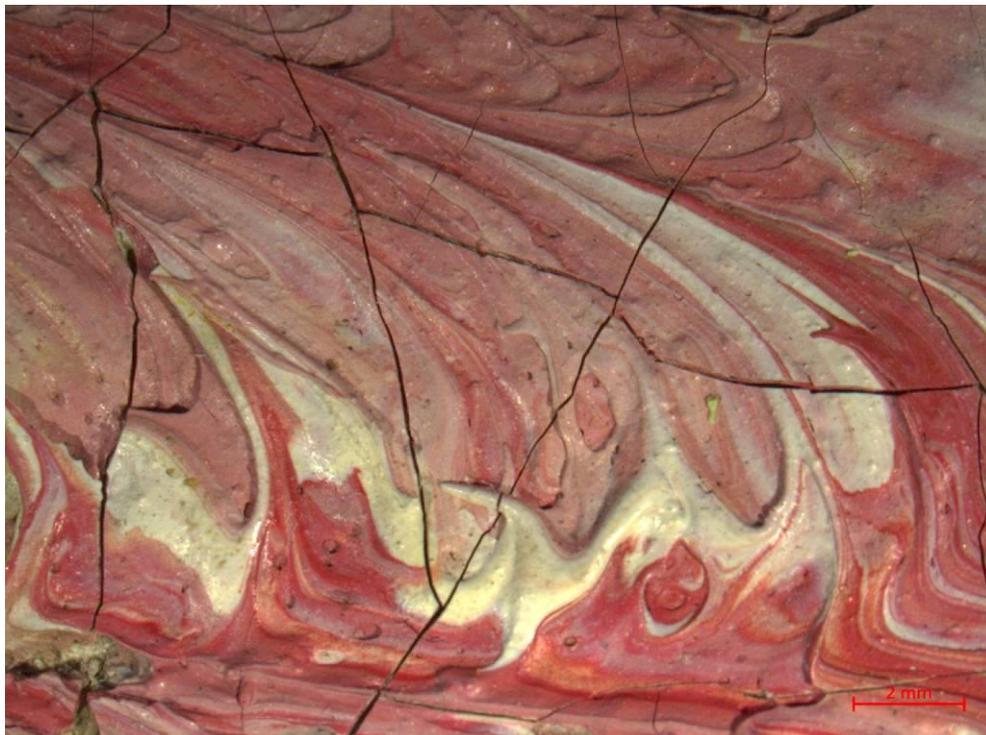


Figure 18: *Landscape of Tiraspol*, detail macro, upper part of the painting, incident light. The paints of a tree motif were applied to the already thoroughly dry layer of the blue sky.

localisation of Figures 19 and 20



Figures 19 and 20: *Landscape of Tiraspol*, microscopic photographs, x 10, left lower edge (Fig. 19) and x 6.3, left lower edge (Fig. 20), incident light. Paint was applied wet-in-wet. Different undulated colours were taken up by the brush and applied to the ground.

localisation of Figure 21

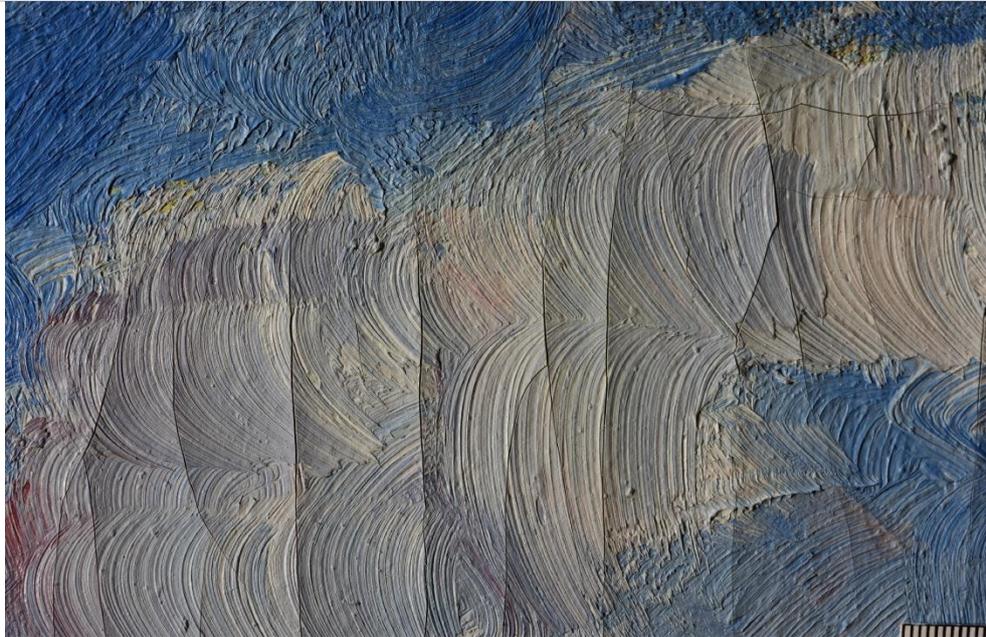


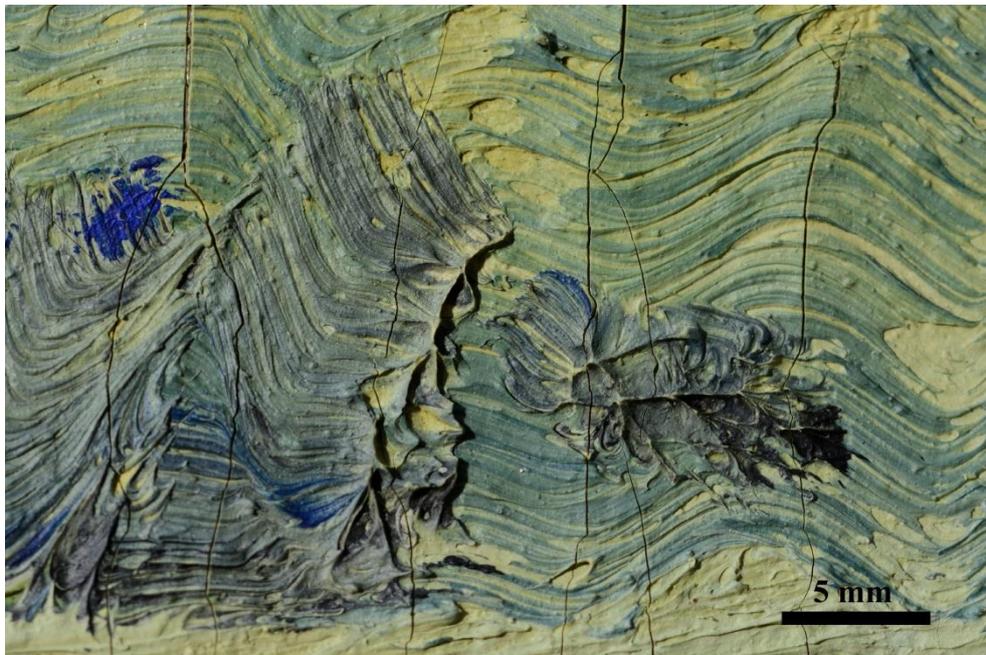
Figure 21: *Landscape of Tiraspol*, detail macro, upper part of the painting, raking light. In the region of the blue sky paint application was done with dynamic brushwork with wavy and arc-shaped brush strokes.

localisation of Figure 22



Figure 22: *Landscape of Tiraspol*, detail macro, upper part of the painting, incident light. Paint application was done with slightly relief-like character.

localisation of Figures 23 and 24



Figures 23 and 24: *Landscape of Tiraspol*, details macro, right lower edge, incident light (Fig. 23) and left lower edge, raking light (Fig. 24). Different tones were applied wet-in-wet and undulated as wavy-shaped brush strokes.

localisation of Figure 25

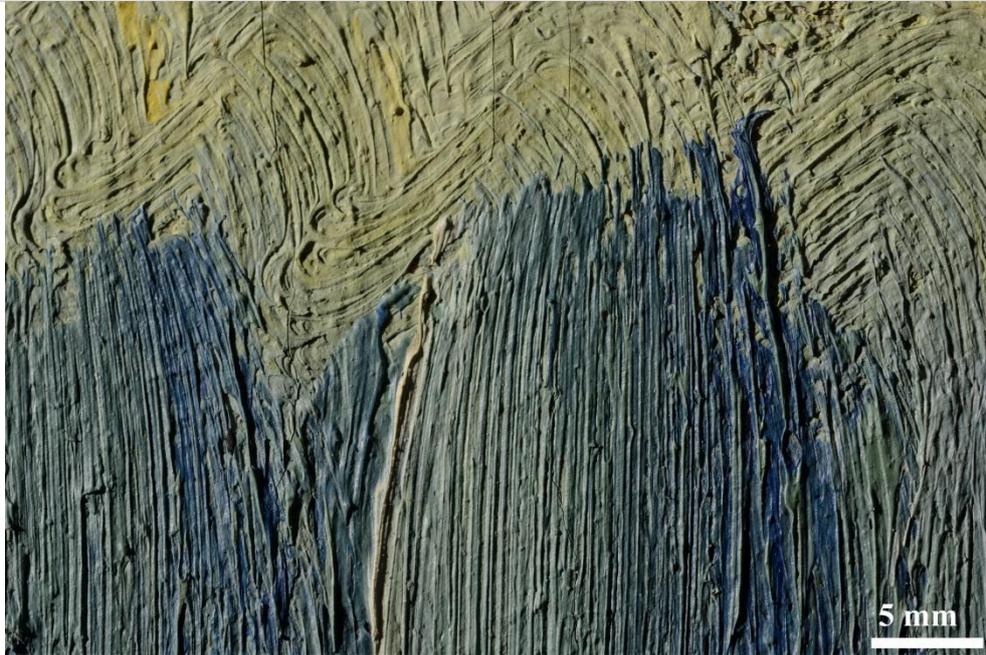


Figure 25: *Landscape of Tiraspol*, detail macro, lower part of the painting, raking light. Different tones (green and blue hues) were applied with 'harder' brush strokes to the thoroughly dry, light green paint layer.

localisation of Figure 26

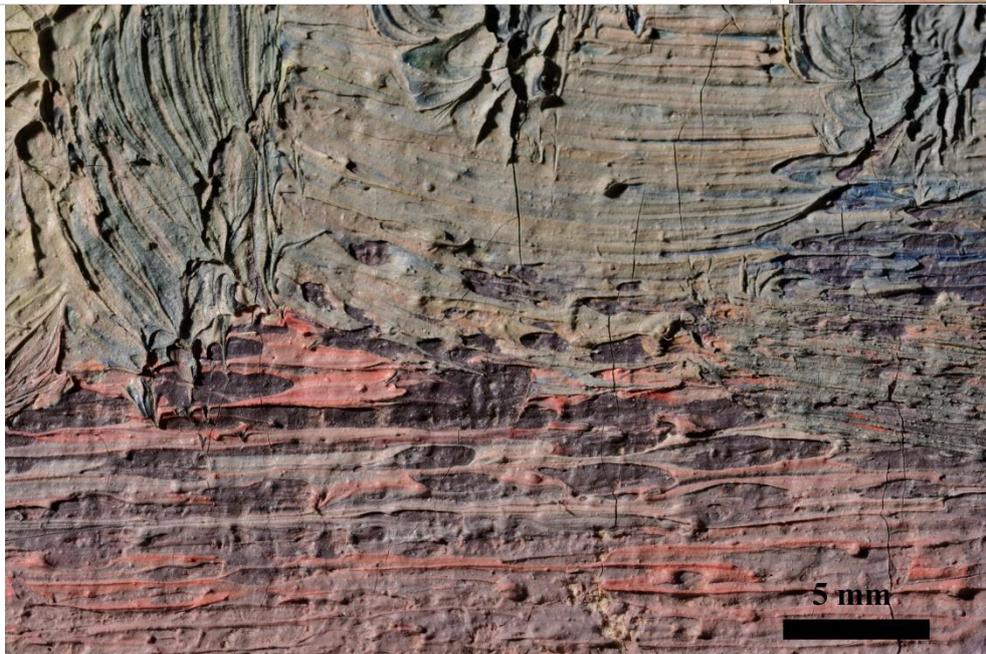
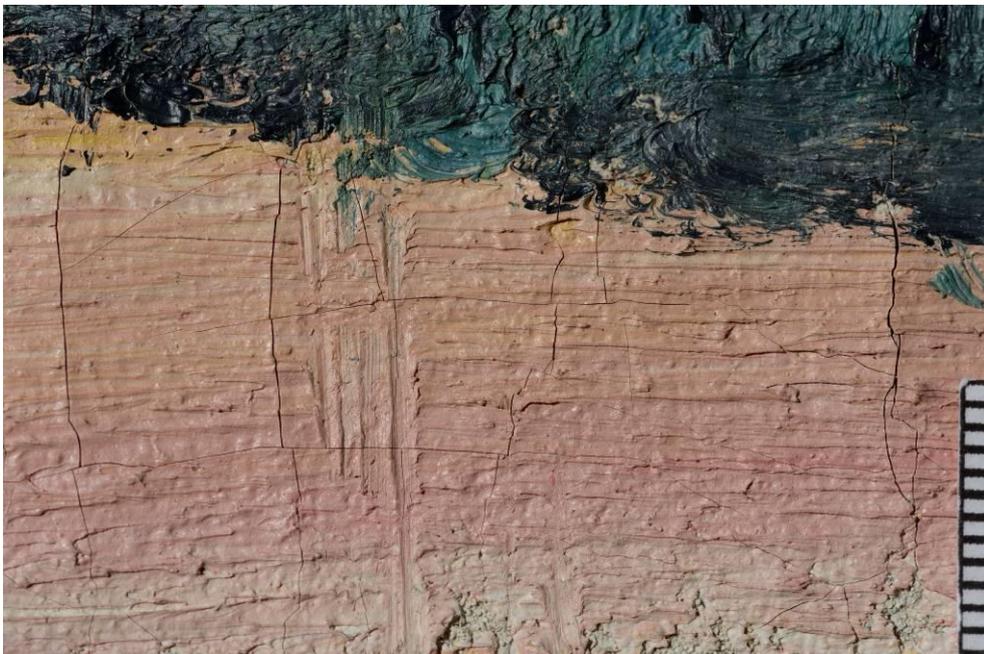


Figure 26: *Landscape of Tiraspol*, detail macro, left lower part of the painting, raking light. Different tones were layered upon another. There is a slightly stippled texture of brush strokes.

localisation of Figures 27 and 28



Figures 27 and 28: *Landscape of Tiraspol*, details macro, lower part of the painting, incident light. As first step the light rose layer was painted by the artist. Afterwards dark green and black tones were applied on the light rose layer. Thin strings of white and green paint are visible on the light rose paint layer (see Fig. 27). A few marks respectively grooves are noticed (see Fig. 28).

localisation of Figures 29 and 30



Figures 29 and 30: *Landscape of Tiraspol*, details macro, left edge, raking light. Contours in dark tone were used by the artist to outline shapes and colour fields as spaces of lawns. These contours were applied as last step.

localisation of Figure 31



Figure 31: *Landscape of Tiraspol*, detail macro, left lower edge, raking light. As a first step a thin and smooth green layer was painted. Afterwards a shape in rose tone was done by the artist. As last step an outlining was applied in dark tone.

localisation of Figure 32

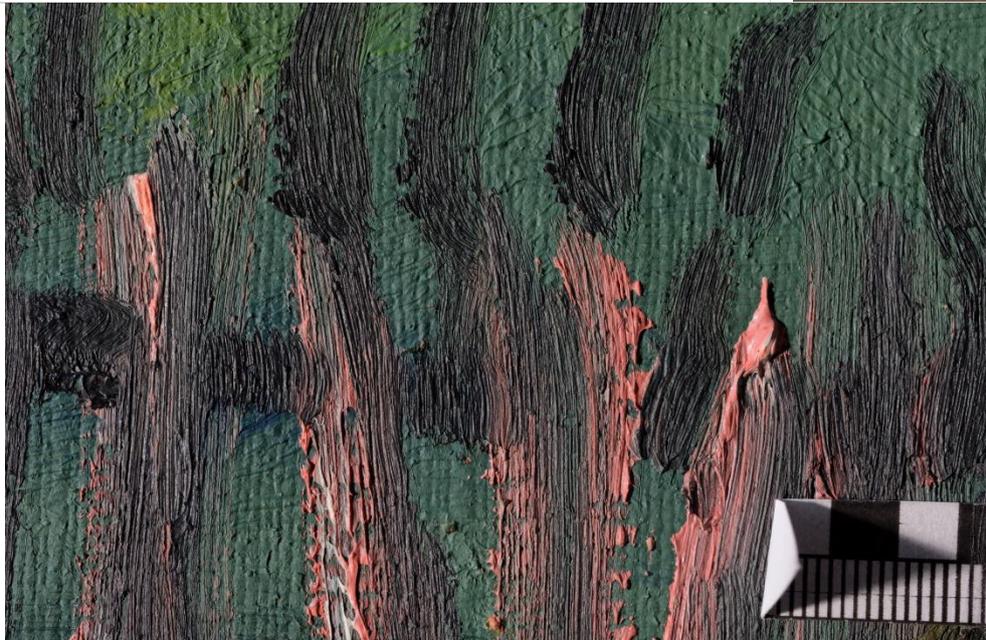


Figure 32: *Landscape of Tiraspol*, detail macro, upper part, centre of the painting, raking light. A smooth and dark green layer was painted as first step. Afterwards the artist placed details and colour accents in black, white and pink paints. The artist predominantly used lines in vertical direction applied with significant brush strokes.

localisation of Figure 33

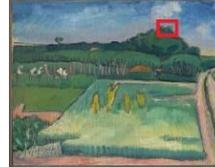


Figure 33: *Landscape of Tiraspol*, detail macro, right upper part, incident light. As a first step the space of the sky was painted. Afterwards different tones were applied with brushwork in wet-on-wet technique.