

Complex Art Conservation and Preservation Problems

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*A Case Study on the Work
of Egon Schiele*

By

Paul-Bernhard Eipper

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ABSTRACT

One of the last works by Egon Schiele (1890–1918) was his painting “*Stadtende/Häuserbogen III (End of the City / Crescent III)*,” dated from 1918, oil on canvas, 110 cm x 140 cm, owned by the Neue Galerie Graz (AT), part of the Universalmuseum Joanneum. The painting suffered from some damage to the paint layer and, in 2010, appeared in poor condition due to presentation conditions and numerous exhibitions. In 2011, an investigation and conservation campaign started. It became apparent at the beginning that the examination alone of the painting “*Stadtende/Häuserbogen III*” would not be sufficient to achieve transferable results: over some years, a first-time investigation of Egon Schiele’s general painting techniques was undertaken. In this investigation, “*Stadtende/Häuserbogen III*” was to occupy a special position. On the backside of this painting, a sketch of a portrait was visible. It was found, for the very first time in 2011, that the image was not a painted sketch; it shows a hidden portrait, from the front side, which has come through the canvas support. Due to examinations without x-rays, two portrait sketches were found under the painting showing the city of Krumau (CZ). One portrait with strong impasto shows Schiele’s early supporter Heinrich Benesch. The portrait is not only overpainted; it is playfully integrated and gives the structure of the city, which is unique in the work of Schiele. The other sketch, on the left side of the now horizontal painting, shows a younger, beardless person—possibly the son of Heinrich Benesch, Otto (In 1913, Schiele painted the double portrait of Heinrich and Otto Benesch). In addition, a false signature was found on the painting. The conservation of the original frame, which was coated with aluminium after 1945, is reported in detail. The degraded chrome yellow and cadmium sulphide determine future conservation. The executed conservation work included the removal of former consolidation material; partial consolidation with Klucel® E; the cleaning with the nonionic surfactant Marlipal® 1618/25, 0.00025 % in vitalized water; and the filling and inpainting of the paint losses with dry pigments and additions of champagne chalk in Klucel® E. The preservation of the artwork in the future is dictated by the ongoing degradation of chrome yellow and cadmium sulphide, the still-ongoing research includes cooperations with Politecnico Milano 1863 (IT); Fondation Beyeler, Basel (CH); and Getty Conservation Institute, Los Angeles (USA). Continuously gained knowledge influences the storage materials and further measures on the painting. The complex interactions

between the environment and the object itself make it necessary to protect the painting—which is continually degrading anyway—from external influences as much as possible.

1. PAINTING MATERIALS AND TECHNIQUES USED BY EGON SCHIELE (1890–1918)

Introduction

The research shows that, unfortunately, the study of Schiele's painting material and technique is still a huge desideratum. Moreover, there are no comparative analyses of the colour material.¹ The current state of knowledge is marginal compared to the importance and value of these works. In 1990, Jane Kallir² complained that far fewer than half of Egon Schiele's paintings still appeared as they did when they were painted. She noted and documented some restoration errors³ such as unnecessary doubling, the application of varnish to the paintings, neglect, too lengthy periods of presentation and acid undercoats on mounted prints.

Schiele's painting materials and technique generated the most damage, in my opinion, resulting in interventions that altered the original appearance of his works. Moreover, both Schiele himself and the owners of his works displayed a certain carelessness in handling his paintings, and the natural degradation of the materials did the rest. Although the increasing value of the works led to increasingly careful treatment, it also led to restoration measures that need not always have been so invasive. The collector Rudolf Leopold also failed grandiosely, restoring Schiele's paintings himself

¹ In the international database of the Getty Institute, "Art and Archaeological Technical Abstracts" <http://aata.getty.edu/NPS/>, there are only three contributions with information on Egon Schiele's technique and painting material to date. Accessed on 29 October 2022. Previously, Jane Kallir commented on Schiele's technique, cf. Jane Kallir, *Egon Schiele. The Complete Works* (New York, 1990), 12, or <https://egonschieleonline.org/overview/materials-condition-and-conservation>. Accessed on 29 October 2022.

² See Kallir, *Egon Schiele*, 661. Schiele is thought to have produced a total of around 330 paintings and around 3,000 drawings.

³ <https://egonschieleonline.org/overview/materials-condition-and-conservation>. Accessed on 29 October 2022.

simply because he felt a kinship with him⁴—without any training in the subject.

In 1990, Kallir also complained about the lack of research on Schiele's paintings, which was supposed to form the basis for a better understanding and treatment of his works.⁵ Due to this dilemma, she sought contact with art historians and conservators and asked them for their observations, with which she supplemented her own observations and the handwritten notes of Otto Kallir (Otto Nirenstein).⁶ The more recent literature on Schiele deals almost exclusively with biographical details and a variety of sources, but not with painting material and technique, which, nevertheless, provide many strong clues to the artist's intended expression.

Against this backdrop, the author attempted, as early as 2013, in time for the Schiele anniversary in 2018, to persuade all the institutions in Austria that have works by Egon Schiele in their collections to embark on a broad-based campaign to examine the paintings to create a fund of observations that would shed light on Schiele's changing painting technique and the state of preservation of his works. The response was sobering: apart from the Universalmuseum Joanneum in Graz (UMJ), all the directors, curators and conservators of the museums approached withdrew with reasons that did not seem very logical for such a long-term project.⁷ Of course, this wait-and-see mentality is in keeping with our national mentality, but Schiele's painting technique remains too little explored in this way. Therefore, it is hoped that this compilation may also provoke opposition and, thus, promote

⁴ "My husband was a soul man, otherwise he would not have been able to discover Schiele." Elisabeth Leopold in an interview with Andrea Schurian, in *DER STANDARD*, 1/2 April 2017, 33.

⁵ Kallir, *Egon Schiele*, 661.

⁶ O. Kallir, *Egon Schiele*. (Wien: Oeuvre Katalog der Gemälde, 1966).

⁷ The Österreichische Galerie Belvedere, Vienna, did not want to support the project by referring to independent research and publications on the subject. It was not until after the first publication concerning this theme—P.-B. Eipper, „Zum Malmaterial und zur Maltechnik Egon Schieles," in *Egon Schiele Jahrbuch (IV–VIII)*, ed. J. T. Ambrózy, C. Carmona, S. Tretter, E. Werth (Wien, 2019), 46–271—that sixteen paintings by Egon Schiele, created between 1907 and 1918, were examined: according to this, almost all materials were given equal importance by the painter. In the individual interplay of picture support, priming, composition lines and colours, Schiele developed what was depicted and gave his work characteristic features. Stefanie Jahn at the Third Egon Schiele Symposium Leopold Museum, Vienna, 2019.

further supplementary research into Schiele's painting materials and technique.

In my opinion, a collegial collaboration or interdisciplinary exchange between all art historians, curators, conservators and natural scientists involved (as was the case with the Rembrandt Research Project in Amsterdam) would be the basis for a solid approach to the various damage patterns and the restorations carried out on the high-priced works. Only the joint compilation of all the individual observations will enable a deeper understanding. Only in this way, can possible wrong decisions be avoided in the future, and can conservation and restoration decisions that have already been made be re-evaluated. Also, in view of the many forgeries circulating, the reappraisal of painting technique and materials would be of great benefit. Thus, what is presented here is a marginalia, an incomplete hull, compiled—in addition to professional activities and other commitments—from the meagre available literature, some analyses and from my own observations.

Painting Materials

Schiele's painting materials were as varied as his painting techniques. Very often, the quality of his painting materials reflected his economic circumstances. Even though his demands on the materials were high, it was often only possible for his patrons to meet Schiele's ideas by procuring better materials.

Papers, Cardboards

On the heterogeneous paper quality: Kallir assumed that uncoated rag paper would have run counter to Schiele's intentions because of its absorbency.⁸ The brown wrapping paper used between 1910 and 1911 and the Japanese paper used in later years were less absorbent. As soon as Schiele was better off financially, he obtained the better Strathmore Japanese paper,⁹ a hundred-percent rag paper with gelatine sizing. These papers are prone to inhomogeneous yellowing and mould growth. In 1918, Schiele's papers

⁸ Cf. Jane Kallir, *Egon Schiele. The Complete Works* (New York, 1990), 661.

⁹ Roessler sent Japanese paper to Schiele in Krumau, in 1911, mentioned in Nebehay, 1979, #114. The watercolour pencil drawing: "Female Nude on Chequered Cloth," 1911, NG Inv.-Nr. II/1302 as well as the pencil drawing: "Female Nude with Tightened Thigh," 1912, NG Inv.-Nr. II/20994, both Neue Galerie Graz, Universalmuseum Joanneum, were executed on Strathmore Japanese paper.

included those with a fifty-percent wood content, forty-percent straw and grass content, and a ten-percent bast content with alum and resin admixtures.¹⁰ These papers discoloured to such an extent that today they can sometimes be mistaken for wrapping paper. Schiele had several sources of supply where he searched for selected papers but—also due to the war years—did not always find what he was looking for.¹¹ Sometimes Schiele also drew on the front and back of his sheets.¹² As a rule, Schiele preferred smooth papers and not embossed papers or those with the visible structure of the scoop net. When it came to formats, he did not stick to the dimensions of the sheets as they were delivered to him but cut them to size himself.

The cheap cardboard as a painting supporter suited Schiele very well because it absorbed the oil well and gave the painting the desired mattness. Most of the time, these cardboard boxes were neither primed nor blocked off, especially when he drew on them with a dull pencil in the wet paint.¹³ Kallir, however, detected a lack of careful priming of the cartons and believed to have found an indication for this in the foxing.¹⁴ In fact, however, most of these cartons were not primed until later by someone else, and the foxing points to excessively damp storage.

Some paintings on paper were mounted on wooden panels after Schiele's death and are, therefore, declared in the literature with incorrect material designations.¹⁵

Wooden Panels

At the beginning of his work, according to Kallir, wooden panels dominated. The preference for “boards” was supported by the advice of Anton Peschka, who advised him to paint easily transportable wooden

¹⁰ Cf. Margaret Hollen Ellis, quoted in Nebhay, 1979, #1579.

¹¹ Cf. Egon Schiele, Brief vom 13. Juni 1918.

¹² E.g., Front: “Masturbating Girl,” 1910, reverse: “Portrait of a Sitting Woman,” NG Inv.-Nr. II/10.804, Neue Galerie Graz, Universalmuseum Joanneum (i. d. F.: NGG); Front: “Sitting Man with Arms Raised” (Arthur Roessler), 1912, (480 mm x 320 mm), reverse: the same model bent over.

http://www.leopoldmuseum.org/media/file/304_dossier_schiele_sitzmann.pdf.

¹³ E.g., “Harbour of Trieste,” oil/cardboard, 1907, former NG Inv.-Nr. I/1206, NGG, restituted in 2006.

¹⁴ Jane Kallir, *Egon Schiele. The Complete Works* (New York, 1990), 661.

¹⁵ E.g., “House Complex in Vienna (Oberdöbling),” 1908, oil/paper, NG Inv.-Nr. I/1913, NGG; “Study Head of a Bearded Man,” 1908, oil/paper, NG Inv.-Nr. I/1914, NGG.

panels in the approximate dimensions of 30 cm x 40 cm, to provide them with catchy titles and, thus, to sell them easily in Vienna. Arthur Roessler also sent panels to Schiele in Krumau, in 1911, for painting with landscape depictions, because these would be easier to sell.¹⁶ Roessler placed two of them with the Goltz Gallery in Munich in September 1911 for 100 marks.¹⁷ On the smoothly primed panels, less paint material remained when the paint was applied, which gives the paintings a higher degree of drama and transparency of the brushstroke.¹⁸ Schiele favoured this type of support because, in his opinion, it had a stronger sheen. After painting with gouache colours mixed with oil, the paintings should, as Schiele explicitly noted, be stored in a dust-free room and then varnished to intensify their lustre.¹⁹ When he varnished one of them himself, the colours bled, although it was not clear whether this was due to the type of varnish or the nature of the commission.²⁰ In any case, he subsequently switched to unmixed oil paints. One must not transfer this practice of varnishing wooden panels to canvas paintings: it can be assumed in Schiele's case that the latter were not varnished by him—nor should they have been—as he wanted to achieve other effects with fabrics.²¹ Coatings are not necessarily present on wooden panels either - original varnishes were often removed again by restorers—exceptions prove the rule.²²

Fabrics

Probably for reasons of cost and format, canvas paintings dominated in the later years. Schiele's canvases from this period sometimes vary greatly in weave and texture. In this context, Kallir detected only a slight influence of texture on the final colour surface. The painting technician does not have to see it that way: if there is coarse weave, the painter must apply more paint so that the weave structure does not dominate. If he wants the painting to

¹⁶ G. Mayer, *Ich ewiges Kind: Das Leben des Egon Schiele* (Residenz Verlag, 2018), 105.

¹⁷ Mayer, *Ich ewiges Kind*, 105.

¹⁸ E.g., "Self-Portrait with Lowered Head—Selbstporträt mit gesenktem Haupt," "Self-portrait with Raised Naked Shoulder—Selbstporträt mit angehobener nackter Schulter," both 1912, both Leopold Museum, Vienna

¹⁹ Cf. A. Roessler, *Erinnerungen*. (Wien, 1948), 23.

²⁰ Cf. C. Nebehay, *Ver Sacrum 1898–1903* (München: Deutscher Taschenbuchverlag, 1979), 1–291.

²¹ Cf. Jane Kallir, *Egon Schiele. The Complete Works* (New York, 1990), 662.

²² Cf. "The Mourner—Trauernde," Leopold Museum, Vienna; "Ida Roessler," 1912, Wien Museum, Vienna

have a fresco-like appearance—as is the case, for example, with Norbertine Bresslern-Roth (1891-1978), who studied at the Academy in Vienna from 1911 in an “unused studio” of Academy professor Ferdinand Schmutzer—the coarse weave is even a basic condition for the dry application of paint, in which the brush only leaves paint on the surface of the weave.²³ In the forty-third exhibition of the Vienna Secession (21 January to 26 February 1913), ten gouaches by Bresslern-Roth were on show alongside works by Schiele and Walde—it can, therefore, be assumed that the painters were familiar with the works of their colleagues. Already, in the compulsion to paint impasto, however, the coarse structure of the support fabric prevails, just as the flat, thin fabrics favour a more economical application of paint and better express the drama of the brushstroke. Kallir also mentioned that Schiele sometimes sewed two smaller pieces of fabric together to form a larger surface.²⁴

Primers

In addition to industrially primed fabrics, we find self-primed fabrics²⁵ and fabrics over-primed with porous chalk primer.²⁶ On the flyleaf of an art book by Anton Peschka, we find a recipe:²⁷ 30 kg of burnt plaster (calcium sulphate hemihydrate), 12 kg of glue, 8 kg of stone powder. The extent to which Schiele adhered to this recipe is still unclear, and even when he spoke of chalk primer, we do not know whether he did not also mean a half-oil primer or just this plaster primer, which technically is not a chalk (calcium carbonate) primer. Investigations of primers have shown that Schiele used

²³ Cf. P.-B. Eipper, „Malmaterial, Malprozess, Maltechnik und Restaurierung. Gemälde von Norbertine von Bresslern-Roth,” *Restaura* 8 (2015): 32–41; P.-B. Eipper, „Bemerkungen zu Malmaterial, Malprozess und Maltechnik der Ölgemälde von Norbertine Bresslern-Roth,” in *Norbertine Bresslern-Roth. Tiermalerin. Ausstellungskatalog, Neue Galerie Graz, Universalmuseum Joanneum*, edited by C. Steinle (Graz, 2016), 234–243.

²⁴ Cf. “Young Man’s Semi-Nude—Halbakt eines jungen Mannes,” 1910, is on the reverse of “Still Life with Books,” 1916, Leopold Museum, Vienna; “The Little City II,” 1913, oil/linen, private collection and “The Little City III—Die kleine Stadt III,” 1913, oil/linen, Leopold Museum, Vienna. Cf. Jane Kallir, *Egon Schiele. The Complete Works* (New York, 1990), 661; T. G. Natter, *Egon Schiele. Sämtliche Gemälde 1908–1909*. (Köln, 2017), 480, 535, 565.

²⁵ Cf. Nebehay, 1979, #910.

²⁶ E.g., “House Wall—Hauswand,” 1914, Belvedere, Vienna; “Blind Mother—Die blinde Mutter,” 1914, Leopold Museum, Vienna; “Edith Schiele, Standing,” 1915, Gemeentemuseum voor Moderne Kunst, The Hague

²⁷ Communication with Robert Holzbauer.

zinc white and barium sulphate in his own primers between 1910 and 1913, and in one case, in 1918, he added calcium carbonate (calcite, double spar, chalk, marble powder). Calcium carbonate with zinc white was added in 1910, 1912, 1914 and 1916.²⁸ Schiele ordered three half-oil primers from Erich Lederer on 3 March, 1916, probably to avoid having to prime and pay for them himself. When Lederer had not yet delivered them by 1 August, 1916, he ordered five of them himself from the paint shop Alois Ebeseder,²⁹ then, at Burgring, Vienna.³⁰ In the majority of the fabrics, which he primed himself from 1915 onwards,³¹ the layer thickness varies, the brush application is clearly visible, and bubbles appear in the primer. These porous surfaces got dirty quickly, were difficult to clean (only dry) and were sometimes disfiguringly over-varnished.

²⁸ Cf. examinations by Eugena Ordonez, cited in Kallir, *Egon Schiele*, 662.

²⁹ Egon Schiele mentioned the paint dealers Landsberger and Ebeseder in a statement of expenses on 00. 02. 1915 (postmark) to Heinrich Benesch (Egon Schiele database of autographs, ID number 1244). Egon Schiele wrote to Erich Lederer on 1 August 1917 and addressed canvases from the Ebeseder paint shop. (The company Alois Ebeseder Künstlerbedarf still exists today at Babenbergerstrasse 3, 1010 Vienna). In a letter from Arnold Landsberger (Mal-Leinwand, Geräte und Künstlerfarbenfabrik XIV Arnsteingasse 31, Niederlage: I Operngasse1) to Egon Schiele, 16 March 1918, he mentioned the purchase of canvases (Egon Schiele database of autographs, ID number 1505). The factory owner Arnold Landsberger acquired Egon Schiele's "Houses on the Klosterneuburg Town Hall Square." In his notebook, Schiele noted a visit by Landsberger on 26 March 1918 at five o'clock (Egon Schiele database of autographs, ID number 1524). In the probate of Egon Schiele (00.11.1918), there is still an open invoice from this same dealer in colour materials (Egon Schiele database of autographs, ID numbers 2654 and 1889). With thanks for the kind reference from Robert Holzbauer, Baden near Vienna).

³⁰ Cf. Nebehay, 1979, 118 f. The shop was located at Opernring 9, where Gustav Klimt (1860–1918), Koloman Moser (1868–1918), August Xaver Karl Ritter von Pettenkofen (1822–1889), Friedrich Ritter von Amerling (1803–1887), Emil Jakob Schindler (1842–1892) and his pupil Ernestine von Kirchsberg (1857–1924) also purchased their painting materials. Although the evidence for this was burnt during the war, stamps of this dealer can be found on the backs of stretcher bars and picture frames, canvases and wooden panels. See also P.-B. Eipper, *Vier Künstlerfarben- und Malmaterialhersteller zwischen 1900 und 1970. Die Reinigung von Gemäldeoberflächen mit wässrigen Systemen* (Bern: Paul Haupt Verlag, 1997), 12–17; Eipper 2014, 76; P.-B. Eipper, „Zum Malmaterial und zur Maltechnik Egon Schieles,“ in *Egon Schiele Jahrbuch (IV–VIII)*, ed. J. T. Ambrózy, C. Carmona, S. Tretter, E. Werth (Wien, 2019), 252.

³¹ Cf. R. Leopold, *Egon Schiele. Gemälde. Aquarelle. Zeichnungen* (Salzburg: Residenz Verlag, 1972), 1–696.

Colours

The use of finished products is documented.³² Egon Schiele mentioned the paint dealers Landsberger and Ebeseder in a list of costs to Heinrich Benesch dated February 1915 (postmark, day illegible).³³ Egon Schiele wrote to Erich Lederer on 1 August 1917 and mentioned canvases from the Ebeseder paint shop. In a letter³⁴ from Arnold Landsberger³⁵ to Egon Schiele, dated 16 March 1918, the latter mentioned the purchase of canvases. The factory owner Arnold Landsberger purchased Egon Schiele's "Houses on the Klosterneuburg Town Hall Square." In his notebook, Schiele noted a visit by Landsberger on 26 March 1918, at five o'clock.³⁶ In the probate proceedings for Egon Schiele (November 1918), there was still an open invoice from this same dealer in paint materials.³⁷

Kallir referred to a surviving list of tempera paints³⁸ containing the following pigments: "lead white (Kremser Weiss), cadmium dark, cadmium orange,³⁹ alizarin madder dark, vermilion, ultramarine dark, ultramarine light, cobalt blue light, cobalt green, chrome oxide green, Veronese green, yellow ochre, terra pozzuli [sic], permanent green light, permanent green dark, lamp black." Elsewhere, saturn or paris red⁴⁰ was mentioned. Unfortunately, no source mentioned the make.

In an examination of the oil colours of an unspecified painting, painted in 1912, the pigments synthetic ultramarine, green earth and vermilion were found; in the oil colours of a painting painted in 1914, cobalt violet, zinc white, emerald green (also Schweinfurt green, Paris green, patent green or Mitis green), cadmium sulphide yellow and vermilion⁴¹ were found.

³² Cf. Peschka, quoted in Nebhay Commentary, 416.

³³ Cf. Egon Schiele Datenbank der Autographen, ID-Nummer 1244.

³⁴ Cf. Egon Schiele Datenbank der Autographen, ID-Nummer 1505.

³⁵ Owner of „Mal-Leinwand,- Geräte und Künstlerfarbenfabrik XIV Arnsteingasse 31, Niederlage: I Operngasse 1."

³⁶ Cf. Egon Schiele Datenbank der Autographen, ID-Nummer 1524.

³⁷ Cf. Egon Schiele database of autographs, ID numbers 2654 and 1889. With thanks for the kind reference from Robert Holzbauer, former Leopold Museum, Vienna.

³⁸ Cf. Jane Kallir, *Egon Schiele. The Complete Works* (New York, 1990), 661.

³⁹ Cadmium sulphide yellow is contained in Schiele's "Stadtende/Häuserbogen III." Analyses: Hans-Peter Bojar, Mineralogy, Universalmuseum Joanneum, Graz, 30 June, 2020.

⁴⁰ Cf. Nebhay Commentary, 378.

⁴¹ Cf. Eugena Ordóñez, quoted in Kallir, *Egon Schiele*, 662.

Homogeneously fine pigments indicate that Schiele did not grind the pigments himself, although these analyses do not prove that he could not have worked with dry pigments.

The colour analyses of the painting “Stadtende/Häuserbogen III,” 1918,⁴² were carried out on very small slabs of paint that had fallen between the painting and the glazing and could no longer be assigned.⁴³ The samples were analysed by powder diffractometry (Bruke D8 Advance) and in the scanning electron microscope with an energy dispersive analyser (Jeol 6610 LV with Oxford EDS). The powder diffractometry plots were compared with spectra from the ICDD PDF4+ database.

The powder diffraction showed the presence of zinc white,⁴⁴ anhydrite⁴⁵ and emerald green.⁴⁶ The ratio of zinc white to anhydrite was about 4 : 1 (semi-quantitative estimation according to the RIR method). It is very likely that Schiele himself stretched the paint in order to economise and/or to make the pure hue appear less bright / duller. Even this small section of Schiele’s colour palette confirms the mixing and stretching practice documented in the sources on Schiele’s painting technique.⁴⁷ The use of an organic yellow (e.g., Indian yellow) as well as cadmium sulphide yellow is also shown.

⁴² “End of the City/Crescent III—Stadtende/Häuserbogen III,” 1918, NG Inv.-Nr. I/466, 109.3 cm x 139.7 cm, oil on thin, industrially pre-primed, wide-meshed linen in simple linen weave, NGG. Previous owner: Karl Grünwald, then Wolko Gartenberg, then Hugo Bernatzik, Vienna. From this collection, the painting was acquired by the Neue Galerie Graz in 1956. Documented in O. Kallir, *Egon Schiele*. (Wien: Oeuvre Katalog der Gemälde, 1966), 231, 458; Complete Catalogue of Paintings 1988, plate 66, pages 61, 298; Jane Kallir, *Egon Schiele. The Complete Works* (New York, 1990), 331; T. G. Natter, *Egon Schiele. Sämtliche Gemälde 1908–1909*. (Köln, 2017), 308, 384/385, 589.

⁴³ Analyses by Hans-Peter Bojar, Mineralogie, Universalmuseum Joanneum, Graz.

⁴⁴ Zinc oxide [ZnO].

⁴⁵ Calcium sulphate [CaSO₄].

⁴⁶ Copper(II) arsenite acetate [Cu(CH₃COO)₂ · 3 Cu(AsO₂)₂], also Schweinfurt green, Paris green, Mitis green, Patent green, Scheele’s green, cf. C. T. Pedersen, “The Killer Wallpapers,” *Journal of Paper Conservation* 4 (2014): 27–29. This highly toxic green colour reacts with fatty acids and forms copper salts and arsenic trioxide. It turns brown in the process. Cf. K. Keune, J. J. Boon, R. Boitelle, Y. Shimadzu. “Degradation of Emerald Green in Oil Paint and its Contribution to the Rapid Change in Colour of the Descente des Vaches (1834-1835) Painted by Théodore Rousseau,” *Studies in Conservation* 58, no. 3 (2013): 233.

⁴⁷ Cf. H. Benesch, *Mein Weg mit Egon Schiele* (New York, 1965), 25.

As with paintings by Vincent van Gogh (1853–1890), colour changes⁴⁸ have been observed in the colours used by Egon Schiele: Thus, the bright chromium oxide yellow (lead (II)-chromate, PbCrO_4) used by van Gogh has undergone a change, as has been the case with the cadmium sulphide yellow of Schiele's "End of the City—Stadtende."⁴⁹ This originally bright yellow irreversibly browns from the surface inwards, disappearing, under the influence of ultraviolet light,⁵⁰ under an increasingly dark brownish layer.⁵¹ In the case of the relatively stable chromium oxide colours from the British manufacturer Winsor & Newton, only two of the medium and dark yellow samples have shown strong changes due to strong exposure to light. Therefore, changing the lighting of the works containing chromium oxide and cadmium sulphide yellow to LED light as well as lowering the ambient air humidity content to slow down this process is recommended.⁵²

Binding Media

The binder analyses for the painting "End of the City—Stadtende," 1918,⁵³ were carried out on very small paint clods. For the infrared spectroscopy, the spectra of the paint particles were compared with reference spectra of pure substances (linseed oil, egg, wax, etc.) and literature data.⁵⁴

⁴⁸ Cf. R. Clarricoates, H. Dowding and A. Gent (eds), *Colour Change in Paintings* (London: Archetype Publications, 2016), 1–138.

⁴⁹ See footnote 42.

⁵⁰ Cf. L. Monico et al., "Degradation Process of Lead Chromate in Paintings by Vincent van Gogh Studied by Means of Synchrotron X-ray Spectromicroscopy and Related Methods. 1. Artificially Aged Model Samples." *Analytical Chemistry* 83, no. 4 (2011): 1214–24; L. Monico et al., "Degradation Process of Lead Chromate in Paintings by Vincent van Gogh Studied by Means of Synchrotron X-ray Spectromicroscopy and Related Methods. 2. Original Paint Layer Samples." *Analytical Chemistry* 83, no. 4 (2011): 1224–31.

⁵¹ Cf. A. Pohlmann, A. Schäning, "'Flying Colours,' Lichtechtheitstests an Künstlerfarben im 18. und 19. Jahrhundert—und heute." *Restaura* 7 (2011): 21–29.

⁵² Cf. M. Lunz, E. Talgorn, J. Baken, W. Wagemans, D. Veldman. "Can LEDs Help with Art Conservation? Impact of Different Light Spectra on Paint Pigment Degradation." *Studies in Conservation* 5, no. 6 (2017): 301 f.

⁵³ See footnote 42.

⁵⁴ J. Van der Weerd, "Microspectroscopic Analysis of Traditional Oil Paint." Dissertation, Swammerdam Institute for Life Sciences. 2002, 1–179; J. Van der Weerd, H. Brammer, J. J. Boon, R. M. A. Heeren, "Fourier Transform Infrared Microscopic Imaging of an Embedded Paint Cross-Section," *Society for Applied*

From the infrared spectroscopy, it can be deduced that, in “End of the City—Stadtende,” vegetable oil, in this case linseed oil, was used as a binder. Wax, proteins or resins (e.g., dammar, mastic, shellac) cannot be detected in any of the samples. Accordingly, it is possible that Wagner paints (Pelikan-Werke, Hanover and Vienna) were used.⁵⁵

Painting Techniques

Schiele studied at the Academy in Vienna from 1906 to 1909, so we can assume that he had a basic knowledge of painting techniques: In this, too, he was of his time. However, there are no statements by Schiele himself about his painting technique, although museums had already recognised, during his lifetime, how important it was to know how and with what the purchased paintings were produced.⁵⁶ As a young student, Schiele received many important stimuli from sculptures and books of his time. He visited the “Kunstschau” of 1908 and 1909, the art collections of the Academy of Fine Arts and the Kunsthistorisches Museum, Vienna; he read the art magazines in coffee houses, and conversed with his fellow students and painters. He had patrons (Carl Reininghaus, Franz Hauer) with collections of their own as well as access to pictorial material (books at the Academy, e.g., Hermann Barth: *Konstantinopel. Famous Art Sites No. 11*, Seemann Verlag, 1901; Hermann Vinzenz Heller (1866–1949): “Basic forms of facial expression—Grundformen der Mimik des Antlitzes,” 1902, and „Proportionstabellen zur menschlichen Gestalt,” 1914; Jean-Martin Charcot (1825–1893): “Photographic Iconography of the Salpêtrière—Iconographie photographique de la Salpêtrière,” 1876) and the card index of criminals with hands in front of their chests.⁵⁷

Spectroscopy 56, no. 3 (2002): 275–83; M. R. Derrick, D. Stulik, J. M. Landry. *Infrared Spectroscopy in Conservation Science* (Los Angeles: The Getty Conservation Institute, 1999), 1–235.

⁵⁵ P.-B. Eipper, *Vier Künstlerfarben- und Malmaterialhersteller zwischen 1900 und 1970. Die Reinigung von Gemäldeoberflächen mit wässrigen Systemen* (Bern: Paul Haupt Verlag, 1997), 12–17.

⁵⁶ Between 1912 and 1938, the Silesian Museum sent out a standardised questionnaire on the painting technique of the acquired paintings. Cf. S. Beisiegel, „Leimfarbe—Das Geheimnis der Maltechnik Otto Muellers,” in *Zeitschrift für Kunsttechnologie und Konservierung (I)* (Worms, 2017), 66; S. Beisiegel, *Künstlerbefragung zu maltechnischen Angaben zwischen 1899 und 1938 im Schlesischen Museum der bildenden Künste in Breslau, München*. (2014), 1–199.

⁵⁷ G. Mayer, *Ich ewiges Kind: Das Leben des Egon Schiele* (Residenz Verlag, 2018), 46f, 55, 95f, 105.

Schiele came into contact with the medium of photography at an early age. He had been given a camera and experimented with it enthusiastically. Schiele also made use of photography when creating drawings or oil paintings.

In order to train the ability to grasp the “character of the person being portrayed” and to reproduce it artistically, one practises the precise observation of models or objects of study in the course of academic training, but also of examples from art history. There are also photographic collections of nudes to study without a model. But one also devotes oneself to the study of pictorial representations of human affects: of course, self-portraits did not only offer the Old Masters the possibility of self-biographical reflection. At around 1900, experiments with (one’s own) facial expressions were also a means of deepening one’s painting skills: *autosomorfia* (“self-grimace”) was cultivated in all places.⁵⁸ Also, Franz Xaver Messerschmidt’s so-called “character heads,” created at the end of the eighteenth century, gave rise to the same discussion in painterly studies,⁵⁹ and drawings from the time of their creation.⁶⁰ Schiele also found inspiration in the cast collection of the Academy,⁶¹ at art exhibitions⁶² and in discussions with colleagues, and, here, too, he is to be understood as a child of his time. Théodore Géricault⁶³ had already painted portraits of inmates of asylums. This was before photographs were taken in the

⁵⁸ E.g., Giacomo Balla (1871–1958), an Italian futurist painter, painted such works. Cf. Olga Kronsteiner: *Grimace Cutter*. In *DER STANDARD*, 25/26 May 2019, 39.

⁵⁹ Franz Xaver Messerschmidt’s character heads were presented at the XXII Exhibition of the Hagenbund in Vienna in 1907. Emil Pirchan also used plastic masks for designs and drawings around 1920 (<https://derstandard.at/2000098628191/Emil-Pirchan-entdecken-Treppenerfinder-und-Scherenschnittmeister>).

⁶⁰ Cf. the sketches by Matthias Rudolf Toma (1792–1869). Even today, artists deal with the character heads: e.g., Arnulf Rainer (born 1929), Florentina Pakosta (born 1933), Arno Lederer (born 1947), Philipp Maurer (born 1952).

⁶¹ A. Domanig, „Zur Geschichte der Gipsabguss-Sammlung der Akademie der bildenden Künste Wien und Egon Schieles Akademiezeichnungen,” in *Egon Schiele Jahrbuch (IV–VIII)*, ed. J. T. Ambrózy, C. Carmona, S. Tretter, E. Werth (Wien, 2019), 282–300; P.-B. Eipper, „Zum Malmaterial und zur Maltechnik Egon Schieles,” in *Egon Schiele Jahrbuch (IV–VIII)*, ed. J. T. Ambrózy, C. Carmona, S. Tretter, E. Werth (Wien, 2019), 246–271.

⁶² The formal canon of Art Nouveau of the time or, exemplarily, the gaunt sculptures by Georg Minne (1866–1941) and Wilhelm Lehmbruck (1881–1919) deserve attention here.

⁶³ https://en.wikipedia.org/wiki/Th%C3%A9odore_G%C3%A9ricault (Zugriff 22.10.2016).

scientific context of modern asylum psychiatry around 1900 and before they were reproduced in textbooks on psychopathology. Photographs also served as models for artists—such as Egon Schiele—and for the “Basic Forms of the Mimic of the Face” by Hermann Heller, 1902,⁶⁴ with which Schiele was familiar. Schiele undoubtedly came into contact with the medium of photography at an early age, had been given a camera himself and experimented with it enthusiastically. Schiele was also an enthusiastic cineaste; the fixed cinemas, established in 1905, offered plenty of exaggerated facial expressions in their silent films.⁶⁵ In addition, Schiele also made use of existing photographs, such as postcards: he was an avid postcard writer. For the painting “House Wall,” he outlined a section of a Krumau picture postcard in red pencil.⁶⁶ Then, he transferred only this to canvas. August von Pettenkofen, like his Barbizon colleagues, had a more relaxed approach to photographs. In Vienna, the “Photographische Gesellschaft” had been founded in 1861, which was important in pioneering the new medium in Austria, where photography found increasing use by artists, from around 1850 (at the latest) when the paper picture offered new possibilities: Friedrich von Amerling, Franz Alt, Julius von Blaas, Carl Rudolf Huber, Ernst Ludwig Kirchner, Anton Kolig, Josef Kriehuber, Hans Makart, Leopold Carl Müller, Mihály Munkácsy, Carl Rahl, Ferdinand Schmutzer, Franz von Stuck⁶⁷ and Emil Jakob Schindler; the latter also making use of his own snapshots. The photographic productions of Adolf Hirémy-Hirschl, Gustav Klimt, Johann Viktor Krämer, Franz Matsch and

⁶⁴ Hermann Vinzenz Heller (1866–1949) taught anatomy at the Vienna Academy of Fine Arts. Christian Bauer, “Der Ausdruck in Schieles frühem Porträtschaffen—The Expression in Schiele’s Early Portraiture.” Presentation at the Third International Egon Schiele Research Symposium, Neulengbach, 15 May, 2014.

The artist Tracey Emin speculated about the involvement of photos in Schiele’s artistic development process: “I finally want to know where he hid his erotic photos! There are hundreds of photos by Schiele, but none erotic. I can’t believe he didn’t take any. Because many of his drawings look as if they had been put over a photo and copied. They are too perfect, too mannered. Obviously because he took photographs.” See <http://kurier.at/kultur/kunst/tracey-emin-wo-sind-schieles-erotikfotos/126.780.142>, accessed on 22 March, 2016.

⁶⁵ Presentation by Eva Werth at the Sixth Symposium of the Egon Schiele Research Society, 14 October, 2016, at the Albertina Vienna: Faszination Paris—Schiele zwischen Rimbaud und Apachentanz. On the cultural transfer from the art and lifestyle metropolis of Paris to early modern Vienna.

⁶⁶ A. Winklbauer, “Inside Egon Schiele,” *Belvedere Kunstmagazin* 2 (2018): 31.

⁶⁷ Franz von Stuck and Photography. Staging and Documentation. Exhibition Catalogue Munich 1996; The Artist as Photographer. Ernst Ludwig Kirchner’s photographic work, ed. T. Sadowsky, Kirchner Museum Davos 2016, 1–160.

Carl Johann Peyfuss, up to Alfons Walde, suggest that poses, costumes and arrangements, for example, were tested with them.⁶⁸ Although it was known to their contemporaries that these painters had a marked preference for photography and were themselves enthusiastic photographers, that it was practised at the Academy in Vienna and that the results were collected was not talked about openly after 1900. The playful and creative approach to the medium, which had been common until then, was lost at the time when the Vienna Secession exhibited light pictures as independent works of art for the first time.⁶⁹ The way visual artists dealt with the possibilities of photography, thus, ranged from ambitious competition to pragmatic exercise to offended disdain, which was sometimes integrated into patronising praise.⁷⁰ The alleged absence of the “soul” in the act of photography was one of the main arguments of those who rigorously denied that photography had any artistic character: photography was a technical process in which someone merely pressed the shutter release. It was, therefore, a simple image of nature, in contrast to the subjective quality of true art. The artist had to choose from the wealth of colours and forms offered by nature in order to make the intended statement.⁷¹ The fact that portrait photographs

⁶⁸ Leopold Carl Müller arranged several photographs for his painting “Market in Cairo,” 1875–1879; Franz Matsch based his painting “Prince Ludwig of Hungary,” 1907, on a photograph of his son. M. Faber, „Wer hat Angst vor Fotografie?“ *Belvedere Magazin* (2016): 14 f; R. Gerold, „Verspielte, gefährliche Mätresse der Malerfürsten.“—“Playful, Dangerous Mistress of the Painter Princes.” In *DER STANDARD*, Wednesday 20 July, 2016, 24.

⁶⁹ INSPIRATION FOTOGRAFIE Von Makart bis Klimt. Ausstellung Belvedere Wien, 17. Juni 2016 bis 30. Oktober 2016, in *Schaulust. Die erotische Fotografie von Alfons Walde*, ed. P. Coeln (Wien: Haymon Verlag, 2015), 1–191.

⁷⁰ *The concern that Daguerre’s [...] invention would put landscape drawing out of course has [...] disappeared, one has become convinced that [...] it can serve as an excellent aid, but can never make the hand of the man who must mentally feel his object superfluous. [...] they serve as an excellent aid, but can never make the hand of the man who must grasp and feel his object spiritually dispensable; the insightful will not miss their usefulness, but at the same time they provide him with the proof that it always [...] requires a higher intelligence, that it requires the soul, if a representation is to appeal to the mind and become part of that spice that is peculiar to the enjoyment of art works of every kind.* [“A. M.” in *Grätzer Zeitung*, no. 77, 12.5.1842, quoted in B. Schaukal, „Zwanzig Beiträge zur Geschichte der Fotografie. S. 21–167,” in *Ein. Blick. Ausgewählte Fotografien aus dem Steiermärkischen Landesarchiv*, ed. J. Riegler (Graz: Steiermärkisches Landesarchiv, 2016), 48.]

⁷¹ According to a statement by the painter James McNeill Whistler: “Nature contains the elements in colour and form of all paintings, just as the keyboard contains the

themselves served painters such as Franz von Lenbach as the basis for their portraits, that they were re-coloured or painted over completely by painters and photographers alike, and that they were mounted in passe-partouts and decorative frames, is proof of the medium's acceptance and presence.⁷² Although we do not know of any photo manipulations in Schiele's work, any photo stagings would illustrate his loose handling of the medium of photography and suggest—as with his teacher Klimt—that he used his own photographs as inspiration and also, in addition to the living model, as models; we do know that he worked with the medium. The loss of these photographs—very likely judged obscene by his heirs and therefore disposed of—is a loss—also in terms of painting technique.

In any case, Schiele worked in Krumau with panoramic photographs of the town. He sent one of them to Arthur Roessler and framed the section of the “Dead City” on it.⁷³ However, this does not explain the elevated vantage point from which he painted many of his views of the town. Due to Krumau's topography, this viewpoint results.⁷⁴ With Antonín Josef Trčka (1893–1940), he staged the well-known portraits of himself.

Drawings

For **graphics**, we find different materials in different degrees of hardness and thickness. We mainly find graphite and coloured pencils, ink, black and white chalk, red chalk and charcoal. For the preliminary drawing in, later to be coloured graphics, Schiele mainly used graphite and coloured pencils for colourful prints, rarely black (wax) chalk—although the construction lines executed with them were usually already part of the drawing itself. After the preliminary drawing, Schiele used all kinds of paint application techniques: thick and fluid application, impasto application, lean to dry

notes of all music. But the artist is born to choose... .” In P. James, T. Sidey, J. Taylor, *Sunlight and Shadow: The Photographs of Emma Barton 1872–1938* (Birmingham: Birmingham Libraries and Birmingham Museums and Art Gallery, 1995), 65, 71.

⁷² Schaukal, „Zwanzig Beiträge zur Geschichte der Fotografie,” 72f.

⁷³ Postcard dated from 15 May, 1911: “The edge is the upper edge of the Dead City. Greetings Egon Schiele.” Quoted in F. E. Wischin, *Schiele und Krumlov. Egon Schiele Art Centrum, Český Krumlov* (2010), 144.

⁷⁴ “There one learns to look at the world from above and to appreciate the painterly and graphic value in the unusualness of his show.” According to the book of memories, Egon Schiele Archive, 508, Albertina Vienna. Quoted in Wischin, *Schiele und Krumlov*, 79.

application, stippled, wiped application with brushes of different types (leaf and round brushes, although he preferred leaf brushes and bristle brushes to hair brushes) and widths. He varied the thickness of the brushstroke through different pressure and posture. Depending on the format, the thickness of the leaf brushes used varied between 0.5 cm and 2.5 cm, mainly between 1.8 cm and 2 cm. He differentiated in the painterly formulation between skin and fabric parts, although these were generally not the same.⁷⁵ In the watercolours, the generous use of water in the areas adjacent to the colour application sometimes lead to strong rippling of the paper. In the gouaches, especially with the richly applied gouache colours, there was often tension between the support and the paint, even as the weakly bound colours dried. This resulted in adhesion problems, especially when the sheets were moved roughly, or even bent, combined with flaking of the paint layer, especially in the white gouache borders of his figures and portraits.⁷⁶ Flaking and consequent loss of colour are a perennial problem in his gouaches, especially the more impasto ones. Moreover, gouache and watercolours were often mixed in Schiele's work.⁷⁷ Later corrections or overpainting with graphite and coloured pencils was possible. Puncture holes from the attachment of the sheets to the painting board are often found, especially in the corners, suggesting multiple attachments.⁷⁸ The light outlines appear to us today—due to the yellowing of the papers—to be more contrasting than at the time of their creation. As a rule, the multi-layered structure of his oil paintings is incomparably more complicated.

Oil Paintings

Preliminary sketches on paintings are often based on drawings that have been thought through in detail beforehand as well as spontaneous sketches,⁷⁹

⁷⁵ Communication with Johann Thomas Ambrózy, Vienna.

⁷⁶ E.g., "The blind I—Die Blinde I," 1913, and "Holy Family – Heilige Familie," 1913, both privately owned; "Eduard Kosmack with raised left hand," 1910, New Gallery, New York.

⁷⁷ Cf. Benesch 1917, quoted in Nebehay, 1979, #1178.

⁷⁸ E.g., "Self-portrait," "Self-portrait in a shirt," both 1910, both Leopold Museum, Vienna; "Self-portrait," 1910, private collection.

⁷⁹ Schiele to Richard Lanyi, 1 March 1917: "But you must remember that my drawings have no other purpose than to be preparations for pictures to be painted—that they are intended only for me and are of immense value to me—because I have the 'next' idea for a work before me. Unfortunately, my most valuable sheets for me have all too often been taken away from me, and so it happened that many great

although there are also paintings or oil sketches without preliminary drawings.⁸⁰ For example, he dealt with his patron Heinrich Benesch several times in drawings: he drew him several times in 1912, 1913, 1915 and 1917.

Sometimes he used a **grid** to transfer the drawing to the canvas, which he laid over the drawing.⁸¹ For the preparatory drawings in oil paintings, the same applied as for the preparatory drawings in prints: Schiele mainly used graphite and coloured pencils, rarely black (wax) chalk—whereby the construction lines executed with these were usually already part of the picture and were covered by oil paint. The blue brush sketch, which he knew from Klimt,⁸² exists in Schiele's work as well as preliminary sketches in brown, dark brown, umbra and black. After the preliminary drawing, Schiele used all the techniques of applying paint: thick and fluid application, impasto application, lean to dry application, stippled, wiped application, wet in wet and multi-layered; always with brushes of different types (leaf and round brushes, although he preferred leaf brushes and bristle brushes to hair brushes) and widths. Through different pressure and posture, he varied the thickness of the brushstroke, especially in oil painting. Depending on the format, the leaf brush thicknesses used varied between 0.5 cm and 2.5 cm, mainly between 1.8 cm and 2 cm. Despite the importance of the preparatory drawing itself, which usually dictated the exact execution, Schiele also frequently struggled with the form on the canvas, which is evidenced, above all, by his manifold overpainting of sections, where his multi-layered structure is often confusing for the viewer. These were not always *pentimenti*,⁸³ for the most part, his underpaintings were intentional, as we

pictures already got stuck in their first germ and one is finally deceived and believes—that my sheets are already pictures,” in A. Roessler (ed), *Briefe und Prosa von Egon Schiele* (Wien, 1921), 172; cf. P. Weiermair, *Egon Schiele. Schriften und Zeichnungen* (Vierter Druck, Innsbruck O. J., Privatdruck, Auflage: 500 Stück, n.d.), 55.

⁸⁰ “Study of a nude,” 1908, oil/cardboard, Leopold Museum, Vienna; “Study head of a bearded man,” 1908, oil on paper, NG Inv. No. I/1914, NGG.

⁸¹ Rasterised drawing: Erich Lederer, standing with hand on hip, signed and dated lower right “Egon Schiele 1913,” gouache, watercolours and pencil on paper, 48.3 cm x 32.1 cm; model for the portrait Erich Lederer, oil/linen, 1913, Kunstmuseum Basel, Switzerland; composition studies for a reclining couple, c. 1913–1915, pencil/paper, Inv. ESA322/15r and ESA322/16r, Albertina Vienna (fig. in Egon Schiele, Catalogue Albertina 2017, 272).

⁸² Gustav Klimt: “Church in Unterach am Attersee—Kirche in Unterach am Attersee,” 1916.

⁸³ Such as the overpainted preparatory drawing at the top left of “Embrace—

find in his landscapes,⁸⁴ for example: he played with the impasto of the underlying layer of paint and sometimes rubbed through the upper layer of paint. In his townscapes, he sometimes undercoated façades and roofs with colour in order to paint or glaze over them in a different colour after they had dried. Sometimes he also wiped off the freshly applied colours again, slightly reducing them. Since Schiele did not adhere to painterly principles—such as “bold on lean”—adhesion damage and craquelé formations were pre-programmed,⁸⁵ or at least there were many differences in gloss in a painting.

In his oil paintings, we find **preliminary drawings** in only one medium as well as several combined with each other, such as graphite pencils,⁸⁶ coloured pencils,⁸⁷ and black (wax) oil pastels.⁸⁸ Coloured preparatory drawings were made with diluted oil paint in ultramarine blue,⁸⁹ diluted brown-black oil paint,⁹⁰ black oil paint,⁹¹ and, mostly, the oil colours Prussian blue, ultramarine blue and black, in various proportional mixtures.⁹² The application of the preparatory paint could be done so sweepingly with a rich brush that it would run downwards in gutter traces.⁹³

Umarmung (Lovers II),” 1917; overpainted composition in “Mother with two children,” 1915–1917, both Belvedere, Vienna; “Houses with colourful laundry—Haus mit bunter Wäsche,” 1914, private collection. He particularly struggled with “Man and Woman II (Lovers III),” unfinished, 1918, Leopold Museum, Vienna, where at least three figures and five heads are found painted over.

⁸⁴ E.g., “Autumn Trees I,” 1911, private property, Vienna; “Autumn Sun I,” 1912, private collection; “Four Trees,” 1917, Belvedere, Vienna.

⁸⁵ E.g., “Mother with two children,” 1915–1917, Belvedere, Vienna; “Wally Neuzil,” 1912; “Small tree in late autumn,” 1911, both Leopold Museum, Vienna.

⁸⁶ E.g., “Autumn tree with fuchsias,” 1909, Hessisches Landesmuseum, Darmstadt; “Gertrude Schiele,” 1909, MoMa, New York; “Dead Mother,” 1910; “Self-Portrait with lampion flower,” 1912; “Wally Neuzil,” 1912; “Small Tree in Late Autumn,” 1911, all four Leopold Museum, Vienna.

⁸⁷ E.g., “Danae,” 1909, Lewis Collection, Chicago.

⁸⁸ E.g., “Karl Zakovšek,” 1910, private collection, New York; “Erwin von Graff,” 1910, Neue Galerie, New York.

⁸⁹ E.g., “Reclining woman,” 1917, Leopold Museum, Vienna; “Embrace,” 1917, Belvedere, Vienna.

⁹⁰ E.g., “Lovers,” unfinished, 1918, Leopold Museum, Vienna.

⁹¹ E.g., “Victor Ritter von Bauer,” 1918, Belvedere, Vienna; “Die Familie,” 1918, Belvedere, Vienna; “Hockendes Männerpaar,” 1918, private collection; “Albert Paris Gütersloh,” 1918, The Minneapolis Institute of Art.

⁹² E.g., “End of the city/Crescent III,” 1918, NGG; “Karl Grünwald,” 1917, Toyota Municipal Museum of Art, Nagoya.

⁹³ E.g., “Lovers,” unfinished, 1918, Leopold Museum, Vienna.