

*The Siege of Jerusalem and Mount Golgotha:*  
Bemmel, Brueghel and Savery  
Around a Miniature from the Collection  
of the National Museum in Kraków

**ZOFIA MANIAKOWSKA-JAZOWNIK**

National Museum in Kraków  
e-mail: [zmaniakowska@mnk.pl](mailto:zmaniakowska@mnk.pl)  
ORCID: 0000-0001-6941-6512

**MARTA MATOSZ**

National Museum in Kraków  
e-mail: [mmatosz@mnk.pl](mailto:mmatosz@mnk.pl)  
ORCID: 0000-0001-6721-7296

**ANNA RYGUŁA**

National Museum in Kraków  
e-mail: [arygula@mnk.pl](mailto:arygula@mnk.pl)  
ORCID: 0000-0001-6356-1049

**Keywords:** miniatures on parchment, miniatures on vellum, technological analysis, macro XRF analysis, Raman Spectroscopy, 16<sup>th</sup> century, Crucifixion, Jacob Savery, Netherlandish Painting

**Słowa kluczowe:** miniatury na pergaminie, badania technologiczne, makro XRF, spektroskopia ramanowska, XVI wiek, Ukrzyżowanie, Jacob Savery, malarstwo niderlandzkie

**Abstract**

Among over one thousand and two hundred miniatures owned by the National Museum in Cracow a very special one can be found. The Crucifixion is painted on a piece of vellum of less than 6 centimetres in diameter. Its artistic roots lead to



16<sup>th</sup> century Netherlands. In museum inventories, this miniature was erroneously described as the *Siege of Jerusalem* and attributed to various artists. The examination of the technique, stylistic and chemical analysis, as well as deciphering the signature led to the identifying the painter as Jacob Savery.

### Abstrakt

#### ***Oblężenie Jerozolimy i Góra Golgoty: Bemmel, Brueghel i Savery. Wokół miniatury ze zbiorów Muzeum Narodowego w Krakowie***

Miniatura będąca przedmiotem artykułu jest jedną spośród przeszło tysiąca dwustu miniatur w posiadaniu Muzeum Narodowego w Krakowie. Scena Ukrzyżowania została namalowana na kawałku pergaminu o średnicy mniejszej niż 6 cm. Jej artystyczne korzenie sięgają XVI-wiecznych Niderlandów. W inwentarzach muzealnych miniatura ta była błędnie opisywana jako *Oblężenie Jerozolimy* i przypisywana różnym artystom. Badanie techniki, analiza stylistyczna i chemiczna oraz rozszyfrowanie sygnatury doprowadziły do identyfikacji jej autora – Jacoba Savery.

### The miniature

The first, so-called Old Inventory of the National Museum in Cracow (MNK), also named The Łuszczkiewicz's Inventory<sup>1</sup>, included a miniature with the number 1190<sup>2</sup> that supposedly depicted "The siege of Jerusalem with small figures of Roman soldiers" (fig. 1). According to the inventory and a listing later issued in print<sup>3</sup>, the author of this miniature, which was donated to the museum by Konstanty Schmidt-Ciążyński<sup>4</sup> in 1885<sup>5</sup>, was "Brueghel de

<sup>1</sup> The inventory was started by professor Władysław Łuszczkiewicz, the first director of the National Museum in Cracow (henceforth as: MNK), in 23<sup>th</sup> July 1883.

<sup>2</sup> The current inventory number of the object is MNK III-min-425 (further in the text referred to as Miniature 425).

<sup>3</sup> *Katalog przedmiotów ofiarowanych przez Konstantego Schmidta-Ciążyńskiego do Muzeum Narodowego w Krakowie* (Kraków: Muzeum Narodowe w Krakowie / Drukarnia Związkowa, 1885). The catalog consists of 143 listings of various kinds, however, some of them include several dozen items – for example, 44 Chodowiecki's prints, 10 Polish coins or 56 drawings of Rocchi.

<sup>4</sup> Konstanty Schmidt-Ciążyński (1818–1889), an outstanding Polish collector and art connoisseur. The profile of the collector and history of the donation describes Paweł Gołyźniak, *Ancient Engraved Gems in the National Museum in Krakow* (Wiesbaden: Reichert, 2017), 31–52.

<sup>5</sup> This information was not mentioned throughout the history of the MNK miniature collection, which was compiled in a chapter of *Rozprawy Muzeum Narodowego* from 1962, despite relating to the donation of Konstanty Schmidt-Ciążyński consisting of thirteen miniatures that hold subsequent positions in the inventory and which were the beginning of the miniature collection of the Museum; Zofia Tobiaszowa, "Historia zbioru miniatur Muzeum Narodowego w Krakowie," *Rozprawy Muzeum Narodowego w Krakowie* 7 (1962): 288–312. With

Velours, †1625?”<sup>6</sup>. However, the siege of Jerusalem is not the subject of the image. A storage room card from 1962 described the miniature as a depiction of Mount Golgotha and – interestingly – attributed it to Willem van Bommel.

Due to its high artistic quality and unique form, it is worth taking a closer look at the miniature and attempting to place it within contexts pertaining to workshops, technology, iconography and stylistic choices. Conservation treatments undertaken in recent years, which included the replacement of glazing of 14 miniatures donated by Schmidt-Ciążyński<sup>7</sup>, created the opportunity to devote more attention to this object.

The miniature was painted in watercolour and gouache on a circular parchment support<sup>8</sup> 6 cm in diameter that was glued onto a thin wood panel. The composition was enclosed by an edging painted in two colours: red-brown and gold. Gold was also used to highlight some of the details.

The overall condition of the miniature can be described as stable, although its surface had suffered severe abrasion, which can be observed on the image of the UV-induced fluorescence. The most advanced damage occurred within the sky area, but small losses of the paint layer revealing the un-primed parchment support can be found in the lower parts of the composition too. Imprecise retouching is present in the topmost fragment of the miniature, disrupting its tonal cohesion. Moreover, mechanical damage to the parchment is visible on its edges (fig. 2).

The miniature was painted with lively, spontaneous strokes, in places almost draft-like, which does not mean the lack of precision or diligent design. On the contrary, every element of the artwork presents an admirable level of detailing, at the same time creating no impression of rigidity of form. The masterful quality of the entire image is even more impressive if one takes into consideration its small size.

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the exception of the Old Inventory, every other listing and card states the author was Willem van Bommel, who is also believed to be the author of the other miniatures donated by Schmidt-Ciążyński (marked MNK III-min-412 to 424).

<sup>6</sup> Jan Brueghel (I) (Brussels 1568–Antwerp 1625).

<sup>7</sup> See Zofia Maniakowska-Jazownik, Anna Ryguła, and Marta Matosz, “Around the Set of Early-Modern Miniatures Painted on Parchment Donated by Konstanty Schmidt-Ciążyński in the Collection of the National Muzeum in Kraków,” *Acta Universitatis Nicolai Copernici. Zabytkoznawstwo i Konserwatorstwo* 53 (2022): 183–230, DOI: 10.12775/AUNC\_ZiK.2022.005.

<sup>8</sup> Compare Amy Knight Powell, “Squaring the Circle: The Telescopic View in Early Modern Landscapes,” *Art History* 39, Issue 2 (2016): 282–301.

## Contexts

The authors could not find direct stylistic and formal analogies to the depiction discussed in this article. However, numerous similarities to the employed colour schemes, certain aspects of the composition's structure, and the motifs used in its creation can be identified in artistic tradition originating from the Netherlands, where the miniature was most likely created. Many elements representing a similar atmosphere, colour choices and composition can be found in the works of Jan Brueghel (I), named as the author of the miniature in the MNK Inventory, and in the circle of artists he knew personally, including Anton Mirou<sup>9</sup> and Marten and Lucas van Valckenborch<sup>10</sup>.

The circular composition is divided into three areas. In the topmost, mainly blues were used to paint the sky and vast highlands. A diagonal line divides the lowest area into two parts: a wide patch of a green hill on the left juxtaposed with a brown scarp. On the right, the composition was closed off with this escarpment and the silhouette of a broken or felled tree with severed boughs. This motif, once considered characteristic of Pieter Bruegel's paintings<sup>11</sup>, was used by a number of artists from his milieu, e.g. Jacob Grimmer<sup>12</sup>, Hans Bol<sup>13</sup>, Lucas van Valckenborch, Gillis van

<sup>9</sup> An example is a small image entitled *Extensive landscape with the rest on the Flight to Egypt*, painted by Anton Mirou (Antwerp 1578–1621/1627) ([https://fr.m.wikipedia.org/wiki/Fichier:Anthonie\\_Mirou\\_-\\_Extensive\\_Landscape\\_with\\_the\\_Rest\\_on\\_the\\_Flight\\_into\\_Egypt\\_-\\_WGA16046.jpg](https://fr.m.wikipedia.org/wiki/Fichier:Anthonie_Mirou_-_Extensive_Landscape_with_the_Rest_on_the_Flight_into_Egypt_-_WGA16046.jpg), accessed April 30, 2023).

<sup>10</sup> Lucas van Valckenborch (Leuven 1535–Frankfurt am Main 1597), *Linz, seen from the Pöstlingberg mountain*, Graphische Sammlung Albertina in Vienna, inv./cat.nr 23476 (<https://rkd.nl/explore/images/22987>, accessed April 30, 2023); Lucas van Valckenborch, *Mountainous landscape with a hunter*, 1595–1598, private collection, Phillips Auctioneers (London) (<https://rkd.nl/explore/images/47463>, accessed April 30, 2023).

<sup>11</sup> The principles of spelling the names of Pieter Bruegel's family were based on Joanna Wieniewicz-Wolska, *Malarstwo niderlandzkie i flamandzkie w zbiorach Zamku Królewskiego na Wawelu* (Kraków: Wydawnictwo Wawelskie, 2021), 14. Pieter Bruegel (Broghel near Breda 1525–Brussels 1569).

<sup>12</sup> Jacob Grimmer (Antwerp 1525–1590).

<sup>13</sup> Hans Bol (Mechelen 1534–Amsterdam 1593). Many of Hans Bol's compositions were painted on the round supports. In that shape he composed the series of twelve months with the illustrations of typical seasonal activities, which refers to the tradition of medieval calendar illuminations. Stefaan Hautekete and Joris van Gierike, *Emblemata Evangelica. Hans Bol* (Brussels: Koning Boudewijnstichting, 2015), 27. Also, the series of seasons of the year painted on vellum are designed in a round shape (see note 51), as well as the print cycles of *History of Jonah*, *History of Abraham*, *The Parable of the Weed*; Ursula Mielke and Stefaan Hautekeete, *Hans Bol* (The New Hollstein. Dutch and Flemish Etchings, Engravings and Woodcuts, 1450–1700, 28) (Amsterdam: Ger Luiten, 2015), part 1, 7–14, 40–43, 51–55, 76–77, and: *St. John Baptist Preaching*, 18–19, *Scenes from everyday life*, part 2, 65–69.

Coninxloo<sup>14</sup> and Jan Brueghel (I)<sup>15</sup>. In the foreground, at the bottom part of the composition, one can see a colourful procession of riders and walkers, stretching in wide bends all the way back to the city gates in the distance. Some of the figures presented in the background are very difficult to distinguish, not only due to their scale and the surface abrasions, but also because of the nearly transparent, metaphysical approach to the application of paint in this area (fig. 3). The procession consists of people from various social classes, their garments representing different cultures<sup>16</sup>. One can identify soldiers and nobles on horseback, and walkers, crowding on their way to the hill on the left side. Far away in the background city walls and a temple can be observed; the temple's top is in the geometrical centre of the panel. The Crucifixion scene was placed in the distance, on the left side. On the hill, painted in a distinctive shade of green, are three crosses. Although their form is basic let's keep in mind that none of them exceeds 7 mm in height – the two crosses to the sides are clearly angled<sup>17</sup>. The short arms of Christ's Cross are easier distinguished, as they were painted parallel to the plane of the image.

<sup>14</sup> Gillis van Coninxloo (Antwerp 1544–Amsterdam 1607).

<sup>15</sup> Teréz Gerszi, "Bruegels Nachwirkung auf die niederländischen Landschaftsmaler um 1600," *Oud Holland* 90, no. 4 (1976): 207.

<sup>16</sup> Stored in the British Museum in London (acc. no. E,6.1-7), the almost five meters long woodcut composition by Pieter Coecke van Aelst from 1553, which describes Turkish customs (*Ces moeurs & fachons de faire de Turcz avecq' les Regions y appartenantes, ont este au vif contrefaictes par Pierre Coecke van Alost, l'An de Jesu Christ M.D.33, Lequel aussy de sa main propre a pourtraict ces figures duysantes à l'impression d'ycelles*), had a large influence on popularising knowledge about the garbs and appearance of this nation ([https://www.britishmuseum.org/collection/object/P\\_E-6-1-7](https://www.britishmuseum.org/collection/object/P_E-6-1-7), accessed April 30, 2023).

<sup>17</sup> The image of three crosses, of which only Christ's Cross is straight and the other two are angled, was used earlier. An example of this is an illumination from a mid-15<sup>th</sup> century misal (Master of Otto van Moerdrecht, The Cleveland Museum of Art, Mr. and Mrs. William H. Marlatt Fund 1959.254 (<https://www.clevelandart.org/art/1959.254>, accessed April 30, 2023) and later works by Albrecht Dürer and Hendrick Goltzius, <https://www.clevelandart.org/art/collection/search?i=3&search=1923.762.10>. In the case of larger paintings, examples include a *Crucifixion* from a diptych by Jan van Eyck, owned by the Metropolitan Museum of Art in New York (henceforth as: MET): *Crucifixion and Last Judgement Diptych*, c. 1440, acc. no. 33.92ab (<https://www.metmuseum.org/art/collection/search/436282>, accessed April 30, 2023), and a *Crucifixion* from Hans Memling's workshop, stored in Szépművészeti Múzeum in Budapest, inv. no. 124, <https://rkd.nl/explore/images/257096>. In the last piece we can find even more inspirations for certain elements of Miniature 425. Another example of these solutions is a small *Crucifixion* scene by Pieter de Kempener from the Národní galerie in Prague, inv. no. O 9004 (<https://rkd.nl/explore/images/286144>, accessed April 30, 2023).

The motif of the Crucifixion located at the left side, with a vibrant procession approaching it from the opposite direction from the bottom, had already been used in a work by Lucas van Leyden from 1517, which depicts Golgotha<sup>18</sup>. Specific characters and groups constituting the composition bring to mind analogous fragments of Miniature 425: a dynamic scene of casting lots for garments, the characteristic set of three crosses on a hill to the left, a rider who appears at the bottom from the right whose horse is in a position similar to that of the bay horse from Miniature 425<sup>19</sup>. Lucas van Leyden is also the painter of *The Round Passion* – a series of ten small Passion scenes composed as tondos, just like the discussed miniature. They were all created in 1509<sup>20</sup>.

In the analysed miniature, the Crucifixion scene is complemented by a group of soldiers and crowds of onlookers, more diverse in appearance near the scene and rather schematically multiplied further away, merging with the edge of the hill. The figures were depicted in natural poses and situations.

<sup>18</sup> Lucas van Leyden (Leiden ca. 1494–1533), *Golgotha*, MET, acc. no. 62.635.115 (<https://www.metmuseum.org/art/collection/search/364784?searchField=All&sortBy=Relevance&deptids=9&when=A.D.+1400-1600&where=Netherlands&ft=lucas+van+leyden&offset=0&rpp=80&pos=72>, accessed April 30, 2023). A certain analogy of composition can be found in the *Landscape with Carrying the Cross* based on the work of the van Eyck brothers, owned by Szépművészeti Múzeum in Budapest, acc. no. 2531. Johannes Wierix illustrated Passion scenes, drawing them with ink on round parchment and paper supports 10–13 cm in diameter. The series is a part of the print and drawings collection in Albertina ([https://sammlungenonline.albertina.at/?query=search=/record/objectnumbersearch=\[7570\]&showtype=record](https://sammlungenonline.albertina.at/?query=search=/record/objectnumbersearch=[7570]&showtype=record), accessed April 30, 2023).

<sup>19</sup> The position of this rider repeats an Albertina drawing based on Jan van Eyck's *Christ carrying the Cross*, Albertina in Vienna – Graphische Sammlung, acc. no. 3025; <https://rkd.nl/explore/images/21495>.

<sup>20</sup> Lucas van Leyden, *The Round Passion*, 1509, Cleveland Museum of Art (<https://www.clevelandart.org/art/collection/search?search=1923.746&filter-include-parts=1>, accessed April 30, 2023). Compare Albrecht Dürer, *Crucifixion*, ~1519, MET, acc. no. 19.73.25 (<https://www.metmuseum.org/art/collection/search/391226>, accessed April 30, 2023). Depictions of Passion motifs on small, circular supports were created with the use of various techniques. Examples of such works include: Israhel van Meckenem, *Six roundel patterns for a goldsmith: the Coronation of the Virgin, God the Father with the Body of Christ, St. Eustace or St. Hubert, the Conversion of St. Paul, Charlemagne and St. Helen, and St. Elizabeth*, ca. 1480–1490, acc. no. 2013.963.3 (<https://www.metmuseum.org/art/collection/search/627260>), pendants with scenes from Christ's life: *Crucifixion, Descent from the Cross*, enamel on gold, beginning of 15<sup>th</sup> cent., Musée du Louvre in Paris, acc. no. MR 2605-2606 (<https://collections.louvre.fr/en/ark:/53355/cl010104826>, <https://collections.louvre.fr/en/ark:/53355/cl010096779>, accessed April 30, 2023); *Diptych of the Passion of Christ*, sculpted in ivory, first half of 15<sup>th</sup> cent., MET, acc. no. 17.190.269 (<https://www.metmuseum.org/art/collection/search/464268>, accessed April 30, 2023). A unique type of small Passion depictions where spherical Gebednsnot (Prayer nut, Prayer Bead) popular in the Netherlands in the 16<sup>th</sup> cent. Many of them were created in the atelier of Adam Dircksz (active 1500–1530, Delft).

A scene that draws particular attention is the dynamic moment of casting lots for garments<sup>21</sup>, located in the middle ground and contrasting with the static figures of Roman soldiers in the foreground. This arrangement of characters exhibits similarity to a small image titled *Crucifixion*, created by Jan Brueghel (I) and in the collection of Kunsthistorisches Museum in Vienna<sup>22</sup> (fig. 4). Some elements were copied almost one to one by Pieter Brueghel (II): a figure leaning against a spear observing the situation, a second kneeling with arms raised skywards and another leaned over kneeling at the opposite side, greedily clutching onto a garment<sup>23</sup>.

In the background, obscured by the blue shades of the view of Jerusalem, a polygonal temple can be observed (fig. 5: a). Similarly shaped buildings are common in many works of the 15<sup>th</sup> and 16<sup>th</sup> century artists from the Netherlands<sup>24</sup>; the more interesting examples include depictions of the Jerusalem

<sup>21</sup> St. John's Gospel, J 19,24.

<sup>22</sup> Jan Brueghel (I), *Crucifixion*, Kunsthistorisches Museum in Vienna – Gemäldegalerie, inv. no. 627 (<https://www.khm.at/en/objectdb/detail/341/>, accessed April 30, 2023).

<sup>23</sup> Pieter Breughel (II) and Joos de Momper (II), *The Crucifixion (Golgotha) in the vast landscape*, Koller (Zürich) 2010-09-14–2010-09-17, no. 30–32 (<https://rkd.nl/explore/images/210641>, accessed April 30, 2023); Pieter Breughel (II) *The Crucifixion or The Calvary*, 1617, Szépművészeti Múzeum in Budapest, inv. no. 1038 (<https://www.mfab.hu/artworks/the-crucifixion-7/>, accessed April 30, 2023); Pieter Breughel (II), *Calvary*, Koninklijk Museum voor Schone in Antwerp (henceforth as: KMSKA), acc. no. 962. The abovementioned works show strong references to a group from a *Crucifixion* paintings from Pieter Coecke van Aelst's (I) milieu, in whose atelier Pieter Brueghel (II) took an apprenticeship (<https://rkd.nl/explore/images/227187>, Christie's 2005–11–16, lot no. 44, accessed April 30, 2023).

<sup>24</sup> A very similar portrayal of both the temple and city walls can be found in Quinten Massijs' (I) *Crucifixion*, 1515–1517, National Gallery of Canada in Ottawa, acc. no. 6190 (<https://rkd.nl/en/explore/images/54878>, accessed April 30, 2023), and in the *Triptych with Crucifixion* from the Mayer van den Bergh Museum in Antwerp, inv. no. 362 (<https://rkd.nl/explore/images/44357>, accessed April 30, 2023). It's also similar in Pieter Coecke van Aelst's (I) *Christ carrying the Cross* from Kunstmuseum in Basel, inv. no. 1250 (<https://rkd.nl/explore/images/239898>, accessed April 30, 2023), and repeated in *Carrying the Cross* by the same author, which is stored in Landesmuseum in Bonn, inv. no. 131 (<https://rkd.nl/explore/images/239903>, accessed April 30, 2023). Some analogies to the form of the temple and wall type are present in *Crucifixion with Mary Magdalene* from the atelier of Maerten de Vos, while the two armoured riders in the centre of the middle ground seem to have an inverse version in miniature 425 – Dulwich Picture Gallery in London, acc. no. DPG250 (<https://rkd.nl/explore/images/64922>, accessed April 30, 2023). Similarities in the structure of the temple can be identified in the *Crucifixion* scene of Jan van Eyck's diptych from MET, c. 1440, acc. no. 33.92ab (<https://www.metmuseum.org/art/collection/search/436282>, accessed April 30, 2023), in the *Jerusalem Triptych* from the Muzeum Narodowe in Warsaw, end of the 15<sup>th</sup> cent., acc. no. Śr.38/1–4 MNW (<https://cyfrowe.mnw.art.pl/pl/katalog/543710>, accessed April 30, 2023), in *Calvary* by Jan van Amstel from KMSKA, acc. no. 2, and *Calvary* by the Master of 1518 from KMSKA, acc. no. 5090, as well as in a small depiction of *Christ Carrying the*

temple from the sketchbooks of Antwerp masters<sup>25</sup> (fig. 5: g, h), dated to the second quarter of the 16<sup>th</sup> century and Jacob Savery's temple in the *Landscape with the story of Jephthah's daughter*<sup>26</sup> (fig. 5: i). Images created by Jan Brueghel (I) in 1594, 1595 and 1605 include this motif as well<sup>27</sup>. The temple and city gate from *Road to Calvary*<sup>28</sup> by Herri met de Bles (fig. 5: b), discussed further below, can also be included among such references.

A characteristic element of Miniature 425 is the use of unusually high viewpoint – although we are looking at a hill – located above the city visible in the background<sup>29</sup>. The observer looks down on Jerusalem, the procession,

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Cross by Jan Gossaert, MET, acc. no. 2016.39 (<https://www.metmuseum.org/art/collection/search/439977>, accessed April 30, 2023). Without doubt, the arrangement of architecture and the procession bring to mind the composition used in the *Crucifixion* from Pieter Coecke van Aelst's (I) milieu, owned by the Muzeum Narodowe in Warsaw, inv. no. M.Ob.590 (<https://cyfrowe.mnw.art.pl/pl/katalog/506840>, accessed April 30, 2023). The shape of the temple was also repeated by Pieter Brueghel (II) in *Calvary* from KMSKA, no inv. 962; this object contains many analogies to Miniature 425, such as the figure of Longinus on horseback, the lot casting group and some composition aspects (<https://kmska.be/en/masterpiece/calvary-11>, accessed April 29, 2023).

<sup>25</sup> Masters of the Antwerp Sketchbook: *Imaginary architecture in a landscape*, ca. 1525–1550, Koninklijke Musea voor Schone Kunsten van België in Brussels (henceforth as: KMSKB), acc. no. 4630, fol. 125 (<https://rkd.nl/explore/images/239709>, accessed April 29, 2023); *Imaginary view on Jerusalem*, ca. 1525–1550, Kupferstichkabinett der Staatlichen Museen Preussischer Kulturbesitz in Berlin (henceforth as: SMPKB), inv. no. 79 C 2, fol. 17r (<https://rkd.nl/explore/images/239316>, accessed April 29, 2023) and *Imaginary architecture in a hilly landscape*, ca. 1525–1550, Kupferstichkabinett SMPKB, inv. no. 79 C 2, fol. 59r (<https://rkd.nl/explore/images/239501>, accessed April 29, 2023).

<sup>26</sup> Jacob Savery (I), *Landscape with the Story of Jephthah's Daughter*, Rijksmuseum in Amsterdam, inv. no. SK-A-2117, <https://www.rijksmuseum.nl/en/collection/SK-A-2117>. The similar temple could also be seen in Jacob Savery, *Hagar and Ishmael*, <https://www.codart.nl/museums/broelmuseum-acquires-a-painting-by-jacob-savery-and-two-engravings-after-his-designs/>, from Broelmuseum in Kortrijk.

<sup>27</sup> Jan Brueghel (I), *Crucifixion*, 1594, private collection (<https://www.janbrueghel.net/object/the-crucifixion>, accessed April 30, 2023); Jan Brueghel (I), *Crucifixion*, 1595, Kunsthistorisches Museum in Vienna, inv. no. 627 ([www.khm.at/en/object/341/](http://www.khm.at/en/object/341/), accessed May 1, 2023); Jan Brueghel (I), *Crucifixion*, 1605, private collection (<https://www.janbrueghel.net/object/crucifixion-munich>, accessed April 30, 2023).

<sup>28</sup> Herri met de Bles (Dinant 1510–after 1550), *Road to Calvary*, 1535, Princeton University Museum of Art, inv. no. y1950-1 (<https://artmuseum.princeton.edu/collections/objects/23367>, accessed April 30, 2023). It is quite obvious, that similar motifs can be also found in graphic sources. The good example is *The group of peasants worshipping an image of Isis on a donkey* by Andrea Alciati, Joahannes Sadeler, *Emblemata VII*; Mielke and Hautekeete, *Hans Bol*, part 2, 75, 77.

<sup>29</sup> This type of depiction is very common in artworks from the Netherlands. Examples include: Paul Bril, *Mountainous landscape with Saint Jerome*, 1592, Mauritshuis in Hague, acc. no. 1204 (<https://www.mauritshuis.nl/en/our-collection/artworks/1204-mountainous-landscape-with-saint-jerome/>, accessed April 30, 2023); Jan Brueghel (I) and Hans



Mount Golgotha and both escarpments flanking the composition; the line of sight is on the level of treetops on the right. Employing such a perspective created the possibility and the space to reference earlier events in a narration form typical for the Middle Ages<sup>30</sup>. Later, it became characteristic for Netherlandic landscapes of the “Weltlandschaft type” created by Joachim Patinir<sup>31</sup> and adopted by many artists of his time. The division of compositions into three zones based on colour (blues for background, greens for middle ground and browns for foreground) is typical in “Weltlandschaft” landscapes too.

Tricks that improve the illusion of depth are the motif of a winding road or river and the addition of trees or escarpments to one side of the foreground<sup>32</sup>. This method was implemented in the analysed miniature through the meandering procession, scarps and trees. A winding road also fills the middle ground of the *Crucifixion* by Hans Memling, owned by the North Carolina Museum of Art<sup>33</sup>; the piece’s blue background is complemented with hills

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Rottenhammer, *Rest on the Flight into Egypt*, 1595, Mauritshuis in Hague, acc. no. 283 (<https://www.mauritshuis.nl/en/our-collection/artworks/283-rest-on-the-flight-into-egypt/>, accessed April 30, 2023); Jan Brueghel (I), *Travelers in a forest with a view of a castle and a wide valley*, private collection ([https://www.christies.com/img/LotImages/2019/PAR/2019\\_PAR\\_16827\\_0039\\_000\(jan\\_brueghel\\_lancien\\_dit\\_brueghel\\_de\\_velours\\_voyeurs\\_dans\\_une\\_foret\).jpg](https://www.christies.com/img/LotImages/2019/PAR/2019_PAR_16827_0039_000(jan_brueghel_lancien_dit_brueghel_de_velours_voyeurs_dans_une_foret).jpg), accessed April 30, 2023); Hans Bol, *Imaginary Landscape with St. John on Patmos*, 1564, Mauritshuis in Hague, inv. no. 1043 (<https://www.mauritshuis.nl/en/our-collection/artworks/1043-imaginary-landscape-with-st-john-on-patmos/>, accessed April 30, 2023); Christoffel van den Berghe, *Summer Landscape*, c. 1615–1620, Mauritshuis in Hague, acc. no. 672 (<https://www.mauritshuis.nl/en/our-collection/artworks/672-summer-landscape/>, accessed April 30, 2023); Jacob Savery (I), *Extensive landscape with a bull hunt*, private collection (<https://www.sothebys.com/en/auctions/ecatalogue/2019/old-master-day-119034/lot.138.html>, accessed April 30, 2023); Jacob Savery (I), *Mountain landscape with resting muleteers and view of the river valley*, Albertina in Vienna, inv. no. 8045 ([https://sammlungenonline.albertina.at/?query=search=/record/objectnumbersearch=\[8045\]&-showtype=record](https://sammlungenonline.albertina.at/?query=search=/record/objectnumbersearch=[8045]&-showtype=record), accessed April 29, 2023).

<sup>30</sup> For example: Jacob Cornelisz van Oostanen, *The Crucifixion*, ca. 1507–1510, Rijksmuseum in Amsterdam, inv. no. SK-A-1967 (<https://www.rijksmuseum.nl/en/search/objects?q=crucifixion&p=1&ps=12&st=Objects&ii=3#/SK-A-1967>, accessed April 29, 2023).

<sup>31</sup> Walter S. Gibson, *Mirror of the Earth: The World Landscape in Sixteenth-Century Flemish Painting* (Princeton: Princeton University Press, 1989); compare Powell, “Squaring the Circle,” 288; and “Joachim Patinir (c. 1480–1524)”, in *Renaissance and Reformation, 1500–1620: A Biographical Dictionary*, ed. Jo Eldridge Carney (Westport: Greenwood Publishing Group, 2001), 280.

<sup>32</sup> Manfred Sellink, *Bruegel. The Complete Paintings, Drawing and Prints* (Ghent: Ludion Press, 2007), 64. A typical example of such compositions is the landscape *The magpie on the gallows* by Pieter Bruegel (I), 1568, Hessisches Landesmuseum in Darmstadt, inv. no. GK165.

<sup>33</sup> Hans Memling (Seligenstad 1430/40–Bruges 1494), *Crucifixion*, 1480, North Carolina Museum of Art, inv. no. 52.9.102 (<https://ncartmuseum.org/object/the-crucifixion/>, accessed April 29, 2023). Basing on the information from database rkd.nl, the author of this work is

and a city outline. However, as with many other works of Memling<sup>34</sup>, we can identify the previously accepted approach of distinguishing the main scene from the middle ground and background through different sizes.

Another characteristic aspect of such works is the arrangement of a distant landscape with a foreground portraying religious scenes oftentimes reduced to staffage and located high up or on the sides of the image<sup>35</sup>, which is the case in the discussed miniature too. Examples of this arrangement can be found in the works by Jan Brueghel (I) (e.g. *Flight into Egypt*<sup>36</sup>) and Jacob Savery (e.g. *Landscape with Tobias and Archangel Raphael Hiking*<sup>37</sup>). Despite different sizes and techniques, in the latter, we can notice more similarities to Miniature 425: the far view settled between hills, a meandering road running from the bottom of the composition.

Of the many possible inspirations for Miniature 425, two of the more apparent and interesting are the *Landscape with Carrying the Cross*, owned by Szépművészeti Múzeum in Budapest and dated to the first quarter of the 16<sup>th</sup> century<sup>38</sup>, and the small *Landscape with Way of the Cross* from Joachim Patinir's circle<sup>39</sup> from the same period. The city view, strongly reminiscent

believed to be the Master of the Legend of St. Ursula (<https://rkd.nl/explore/images/116945>, accessed April 29, 2023).

<sup>34</sup> An example of this is Hans Memling's triptych with a scene of Flight into Egypt, owned by the Louvre Museum; Musée du Louvre, Paris, inv. no. R.F. 1974-30 (<https://collections.louvre.fr/en/ark:/53355/cl010063999>, accessed April 30, 2023), and the *Resurrection Triptych*, inv. no. MI 247 (<https://collections.louvre.fr/en/ark:/53355/cl010061675>, accessed April 30, 2023), as well as *Seven Joys of Mary* from the Alte Pinakothek in Munich, inv. no. WAF 668 (<https://www.sammlung.pinakothek.de/en/artwork/k2xnBroxPd>, accessed April 30, 2023).

<sup>35</sup> See Pieter Bruegel (I), *Road to Emaus*, Staatliche Kunstsammlungen in Dresden, inv. no. A 30196 (<https://skd-online-collection.skd.museum/Details/Index/912928>, accessed April 30, 2023), or *Return of the Prodigal Son* by Lucas van Leyden, inv. no. C 806 (<https://skd-online-collection.skd.museum/Details/Index/887911>, accessed April 30, 2023), also from the Dresden collection.

<sup>36</sup> Jan Brueghel (I), *The Flight into Egypt*, Hermitage in St. Petersburg, acc. no. ГЭ-429 ([https://commons.wikimedia.org/wiki/File:Jan\\_Brueghel\\_\(I\)\\_-\\_The\\_Flight\\_into\\_Egypt\\_\(Hermitage\).jpg](https://commons.wikimedia.org/wiki/File:Jan_Brueghel_(I)_-_The_Flight_into_Egypt_(Hermitage).jpg), accessed April 30, 2023).

<sup>37</sup> Jacob Savery (I), (Kortrijk 1565/1567–Amsterdam 1603), *Landscape with Tobias and the Archangel Raphael on a journey*, Kunsthistorisches Museum in Vienna, inv. no. GG 952 (<https://www.khm.at/objektdb/detail/2185/>, accessed April 30, 2023).

<sup>38</sup> Van Eyck brothers' circle, *Landscape with Christ Carrying the Cross*, Szépművészeti Múzeum in Budapest, first quarter of 16<sup>th</sup> cent. (<https://rkd.nl/explore/images/56013>, accessed April 30, 2023).

<sup>39</sup> Joachim Patinir's circle, *Landscape with the Way of the Cross*, Sotheby's (London), 2000–07–06, no. 157 (<https://rkd.nl/explore/images/52098>, accessed April 30, 2023).

of the abovementioned works, can also be seen in the *Crucifixion Triptych* by Quinten Massijs (I) from the Mayer van der Bergh Museum in Antwerp<sup>40</sup>.

In Miniature 425, at least a few motifs are references to *Road to Calvary* by Herri met de Bles from 1535, owned by the Princeton University Art Museum<sup>41</sup>. Although this painting shows the scene preceding Crucifixion, the similarities are obvious: the procession meandering on its way from the bottom, the type of gate and city walls, the near-literal copy of the figures of horses with riders and the characteristic form of the temple (fig. 6)<sup>42</sup>. A sketch of one fragment of this composition, owned by Staatlichen Museen zu Berlin<sup>43</sup>, exhibits further analogies to Miniature 425. This is also the case with Cornelis Massijs' works addressing the theme of the Way of the Cross<sup>44</sup>. The arrangement of walls and city gates 'below' the foreground, the familiar shape of the temple looming in the distance, the procession stretching back to the gates of Jerusalem and heading towards a hill on the opposite side, with participants painted in natural poses, faraway highlands and the vast, gloomy skies – all these were undeniable inspirations for the author of the miniature under discussion. A work from the milieu of Herri met de Bles, owned by a private collector, also portraying the *Way of the Cross*<sup>45</sup> and referencing Patinir's *Way of the Cross* already described, is yet another example of mutual influence and the circulation of depiction and composition concepts. Rocky hills, a distant perspective and a high vantage point appeared in the works of many artists after the publication of Pieter Bruegel's (I) *Great landscapes* – a series of prints

<sup>40</sup> Quinten Massijs (I) (Leuven 1465/1466–Antwerp 1530), *Crucifixion Triptych*, Mayer van den Bergh Museum in Antwerp, acc. no. 362.

<sup>41</sup> Herri met de Bles, *Road to Calvary*, 1535, Princeton University Museum of Art, inv. no. y1950-1 (<https://artmuseum.princeton.edu/collections/objects/23367>, accessed April 30, 2023).

<sup>42</sup> Even the characteristic shape of the temple is similar to the one from Miniature 425, although here it has a pointed finial. The similar type of gate and city walls, as well as the whole composition scheme could also be seen in Herri's met de Bles *Christ Bearing the Cross*, Paris/New York, art dealer F. Kleinberger (<https://rkd.nl/en/explore/images/67981>, accessed April 29, 2023).

<sup>43</sup> Meesters van het Antwerpse Schetsboek, Fragment of a *Christ Bearing the Cross*, ca. 1525–1550, inv. no. 79 C 2, fol. 32r (<https://rkd.nl/explore/images/239348>, accessed April 29, 2023).

<sup>44</sup> *Road to Calvary*, attributed to Cornelis Massijs (Antwerp 1510–1556), KMSKB, inv. no. 6644 (<https://rkd.nl/explore/images/51737>, accessed April 30, 2023); Cornelis Massijs, *Road to Calvary*, private collection (<https://rkd.nl/explore/images/51736>, accessed April 30, 2023). The group of these analogies includes a sketch of a fortified city from the milieu of Cornelis Massijs, owned by a private collector (<https://rkd.nl/explore/images/262358>, accessed April 30, 2023).

<sup>45</sup> Herri met de Bles' milieu, *Way of the Cross* (<https://rkd.nl/explore/images/51738>, accessed April 30, 2023).

created in cooperation with H. Cock following the artist's return from Italy – although the beginnings of these features were formed much earlier, an example being *The Passion* by Hans Memling, owned by Musei Reali in Turin<sup>46</sup>. The composition with a faraway view of a city, enclosed with tall escarpments on both sides, was also used by Gillis van Coninxloo in his *Mountainous landscape with a city view*<sup>47</sup>. The same artist set the main scene of *Abraham's Sacrifice* in the distance on a tall scarp at the left side of the image, with a long perspective in the centre of which he painted a city<sup>48</sup>. This type of city view flanked by foreground trees can also be seen in his *Finding of Moses*<sup>49</sup>, *Landscape with Venus and Adonis*<sup>50</sup> and the excellent *Mountainous landscape*<sup>51</sup> (once attributed to Jan Brueghel (I)) owned by Museum Boijmans van Beuningen. The same collection comprises the *Landscape with the parable of the Good Samaritan* by Hans Bol, of similarly structured composition<sup>52</sup>.

Another trail leads to Hans Bol too. Two of his works from 1591<sup>53</sup>, painted with gouache on parchment, include two-colour borders (reddish-brown and

<sup>46</sup> Hans Memling, *Passion of Christ*, ca. 1470, Galleria Sabauda in Turin, inv. no. 8 ([https://museireali.beniculturali.it/catalogo-galleria-sabauda/#/dettaglio/137948\\_Passione%20di%20Cristo](https://museireali.beniculturali.it/catalogo-galleria-sabauda/#/dettaglio/137948_Passione%20di%20Cristo), accessed April 30, 2023).

<sup>47</sup> Gillis van Coninxloo, *Extensive mountainous landscape with a fortress town in the middle distance*, Staatliche Kunstsammlungen in Dresden (<https://skd-online-collection.skd.museum/Details/Index/891281>, accessed April 30, 2023).

<sup>48</sup> Gillis van Coninxloo, *Large landscape with Abraham's Sacrifice*, Staatliche Kunstsammlungen in Dresden (<https://skd-online-collection.skd.museum/Details/Index/981764>, accessed April 30, 2023).

<sup>49</sup> Gillis van Coninxloo, *The finding of Moses*, Staatliche Kunstsammlungen in Dresden (<https://skd-online-collection.skd.museum/Details/Index/981937>, accessed April 30, 2023).

<sup>50</sup> Gillis van Coninxloo, *Landscape with Venus and Adonis*, 1580s, Cleveland Museum of Art (<https://www.clevelandart.org/art/1962.293>, accessed April 30, 2023).

<sup>51</sup> Gillis van Coninxloo, *Mountainous landscape*, 1600, Museum Boijmans van Beuningen in Rotterdam (<https://www.boijmans.nl/en/collection/artworks/113193/mountainous-landscape>, accessed April 29, 2023).

<sup>52</sup> Hans Bol, *Landscape with the Parable of the Good Samaritan* (<https://www.boijmans.nl/en/collection/artworks/73246/landscape-with-the-parable-of-the-good-samaritan>, accessed April 29, 2023). Also some smaller details show similarity between Bol's works and Miniature 425, where the degree of similarity may indicate the existence of patterns functioning in a given circle (a good example could be a pair of horses taken from behind on the first plan in the Hans Bol's *View of Marketplace at Bergen-op-Zoom* (<https://www.markiezenhof.nl/over-ons/nieuws/markiezenhof-in-google-art-project>, accessed April 30, 2023). Stefaan Hautekeete, "New Insights into the Working Methods of Hans Bol," *Master Drawings* 50, no. 3: South Netherlandish & Flemish Drawings, part I (Autumn 2012): 345.

<sup>53</sup> Hans Bol: *Winter*, 1591 (<https://rkd.nl/en/explore/images/294755>, accessed April 30, 2023); *Summer*, 1591 (<https://rkd.nl/en/explore/images/294754>, accessed April 30, 2023), and the rectangular piece: *Abduction of Europe*, 1585, Rijksmuseum in Amsterdam (<https://www.rijksmuseum.nl/en/search/objects?q=gouache&p=41&ps=12&st=Objects&ii=5#/>

gold)<sup>54</sup> and detailing in gold, much like Miniature 425. In both cases a round piece of parchment was glued onto a wood panel. This form of border can be identified in other gouache paintings by Bol<sup>55</sup> (fig. 7); Frans Boels, Bol's stepson and pupil, enclosed his compositions in a like fashion. In the National Museum in Stockholm, is a small-size series depicting the seasons, also made on parchment with watercolours and gouache paint<sup>56</sup> and including this border type. Another student of Hans Bol, Jacob Savery, implemented such a border in his *Battle Between the Israelites and the Hordes of Amalek*<sup>57</sup>.

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RP-T-1919-15,485, accessed April 30, 2023). We can find this type of border in Bernard Lens' Italian-inspired, small landscapes with staffage, which were painted with gouache on parchment (<https://rkd.nl/en/explore/images/53782>, <https://rkd.nl/en/explore/images/53783>, accessed April 30, 2023).

<sup>54</sup> Also seen in Frans Boels' *Extensive landscape with peasants merrymaking*, 1591, private collection (<https://rkd.nl/explore/images/277710>, accessed April 30, 2023).

<sup>55</sup> Hans Bol: *Landscape with travellers and a watermill*, 1579, Christie's (London (England)) 2018-07-03, no. 33 (<https://rkd.nl/en/explore/images/290655>); *Mountainous landscape with the Good Samaritan*, 1585, Amsterdam, Stichting P. en N. de Boer (<https://rkd.nl/explore/images/229977>); *Panoramic landscape with the prophet of Judah riding off with his donkey and on his way getting killed by a lion*, 1588, John and Marine van Vlissingen Foundation (<https://rkd.nl/explore/images/103227>); (vellum on panel), *Extensive landscape with shepherds and their flock, a coastal town beyond*, Christie's (London), 2006-07-07, no. 125 (<https://rkd.nl/explore/images/62264>); *Summer*, 1586, Bassenge (Berlin), 2021-12-01 (<https://rkd.nl/explore/images/303085>); *Autumn*, ca. 1586, Bassenge (Berlin), 2021-12-01 (<https://rkd.nl/explore/images/303086>); *Mountainous river landscape with Mercury on the right with the severed head of Argus and Io turned into a white cow; on the left, Juno sets Argus' eyes on the tail of her peacock*, Sotheby's (London), 2001-07-11, no. 35 (<https://rkd.nl/explore/images/49436>); *Imaginary view of Antwerp*, 1591, Paris / New York, art dealer Haboltdt & Co (<https://rkd.nl/explore/images/117133>); *Elegant hunting party before the abbey of Rouge-Cloître*, 1591, Sotheby's (London), 2011-07-07 (<https://rkd.nl/explore/images/280348>, accessed April 30, 2023). The Rijksmuseum in Amsterdam owns a series of small tondos paintings of the twelve months by Hans Bol, designed by Adrien Collaert (<https://www.rijksmuseum.nl/en/rijksstudio/11025--Adrian-Thyssen/collections/hans-bol-all-the-year-round?ii=0&p=0>, accessed April 30, 2023).

<sup>56</sup> Frans Boels (Mechelen 1555–Amsterdam 1596), *Spring*, National Museum in Stockholm, inv. no. NMB 1 (<http://collection.nationalmuseum.se/eMP/eMuseumPlus?service=ExternalInterface&module=collection&objectId=23941&viewType=detailView>); *Summer*, inv. no. NMB 2 (<http://collection.nationalmuseum.se/eMP/eMuseumPlus?service=ExternalInterface&module=collection&objectId=23942&viewType=detailView>); *Autumn*, inv. no. NMB 3 (<http://collection.nationalmuseum.se/eMP/eMuseumPlus?service=ExternalInterface&module=collection&objectId=23943&viewType=detailView>); *Winter*, inv. no. NMB 4 (<http://collection.nationalmuseum.se/eMP/eMuseumPlus?service=ExternalInterface&module=collection&objectId=23944&viewType=detailView>, accessed April 30, 2023). Frans Boels, *Extensive Landscape with Peasants Merrymaking*, private collection (<https://rkd.nl/explore/images/277710>, accessed April 30, 2023).

<sup>57</sup> Jacob Savery (I), *Battle between the Israelites and the hordes of Amalek*, private collection (<https://www.artnet.com/artists/jacob-savery-the-elder/the-battle-between-the-israelites-and-the-hordes-3ON6TCwJr60TDnI72ovWIg2>, accessed April 30, 2023).

The closest analogies, pointing to the painter from the circle of Hans Bol and Jacob Savery, were confirmed by the new reading of the already known signature barely visible on the miniature.

### Signature

Located on a tree trunk next to the border at the right side of the composition is an inscription written in golden paint, enclosed in a simple cartouche consisting of three lines. In the records of the National Museum in Cracow it was identified as AVB RD 90, but digitally enhanced, magnified photographs enabled correcting the reading of the first three letters (AVE instead of AVB) and revealed the presence of another letter at the beginning of the signature (fig. 8).

Irving L. Finkel<sup>58</sup>, curator and Assyriologist in the British Museum in London, who reads Mesopotamian cuneiform and deciphers hard-to-read messages, identified the first letter as Eszett ß and the last as Y (instead of the Q suspected by the author of this article). Finkel also identified the name in the cartouche as Savery. The date in the inscription is 1590, and the signature reveals the author to be Jacob Savery.

SAVE  
RY90

Eszett – a vertically crossed out letter S – serves as a signature on Jacob Savery’s 1596 drawing *Soldiers attacking peasants*, part of Frankfurt’s collections<sup>59</sup>. The same occurs in the gouache painting on parchment entitled *Mountainous river landscape with bridge*, owned by a private collector<sup>60</sup> and discussed earlier (fig. 9). The signature on this object includes the initial of the author’s first name – “I” for Iacobus<sup>61</sup>.

<sup>58</sup> PhD Irving Finkel (born 1951), British philologist and assyriologist, curator of the British Museum, author of numerous publications. He specialises in cuneiform inscriptions and ancient Mesopotamian clay tablets.

<sup>59</sup> Jacob Savery (I), *Soldiers attacking peasants*, Graphische Sammlung im Städelschen Kunstinstitut in Frankfurt am Main, acc. no. 2771 (<https://sammlung.staedelmuseum.de/en/work/vier-soldaten-ueberfallen-landleute>, accessed April 30, 2023).

<sup>60</sup> Jacob Savery (I), *Mountainous river landscape with bridge*, private collection (<https://rkd.nl/nl/explore/images/231947>, accessed April 30, 2023).

<sup>61</sup> Jan M. Montias also confirms that Jacob Savery signed his works with an “S” monogram: John Michael Montias, *Art at Auction in 17<sup>th</sup> Century Amsterdam* (Amsterdam: Amsterdam

Jacob Savery (I), son of Maerten Jaquesz, was born in Kortrijk between the years 1565 and 1567. He had two brothers, Hans (I) and Roelant<sup>62</sup>. Van Mander<sup>63</sup> described Jacob as the best student of Hans Bol, which likely took place in 1580–1583 in Antwerp. Savery also worked in Haarlem and Amsterdam – just somewhere there, in between Haarlem, which he left after 1581, and Amsterdam, where in 1591 he received the citizenship<sup>64</sup>, and where he died during an epidemic in April 1603<sup>65</sup> at the age of 38, the Miniature 425 was created.

Two generations of the Savery family were educated in Jacob's atelier: his brother Roelant and sons Hans (II), Jacob (II) and Salomon (II), as well as Joos Goemare, Frans Pietersz de Grebber and Guiliam van Nieulandt (II)<sup>66</sup>. Savery was one of the masters who created copies and alternative variants of Pieter Bruegel's (I) drawings<sup>67</sup>, and he often employed Bruegel's motifs and composition concepts in his own works. Literature states unambiguously that Bruegel's art and signature were also forged by Savery<sup>68</sup>. The artist also took strong inspiration from Gillis van Coninxloo.

It should be mentioned that Mayken Verhulst<sup>69</sup>, second wife of Pieter Coecke van Aelst (I)<sup>70</sup> who was Bruegel's teacher, was a great miniature

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University Press, 20020), online ed. (accessed January 20, 2022). Additionally, he claims that 6 out of 10 paintings by Savery sold in 1612 were circular.

<sup>62</sup> Roelant was born in 1576.

<sup>63</sup> Carel van Mander, *Het schilder-boeck waerin voor eerst de leerlustighe iueght den grondt der edel vry schilderconst in verscheyden deelen wort voorghedraghen...* (Haarlem: voor PASCHIER VAN WESBVSCH Boeck vercooper, 1604), 260.

<sup>64</sup> Sylvie De Coster, "Vlijtich, net en met grooter patientie. Nieuwe aanwinst van Jacob I Savery in het Broelmuseum," in *Handelingen Nieuwe Reeks*, vol. 77, ed. Filippe de Potter (Kortrijk: Koninklijke Geschied- en Oudheidkundige Kring van Kortrijk, 2012), 97.

<sup>65</sup> He was buried on the day of St. Adalbert in Zuiderkerk, see Ulrich Thieme and Felix Becker, *Allgemeines Lexikon der bildenden Künstler von der Antike bis zur Gegenwart*, vol. 29 *Rosa–Scheffauer*, ed. Hans Vollmar (Leipzig: E. A. Seemann, 1935), 504–505 (as: Savery, Jacob, I).

<sup>66</sup> [after:] <https://rkd.nl/explore/artists/69908>.

<sup>67</sup> Manfred Sellink states that Jacob Savery and his brother Roelant often signed their drawings and paintings with Bruegel's name: Sellink, *Bruegel*, 37; Filippe De Potter and Isabelle De Jaegere, "Roelant Savery: Život umělce / Roelant Savery: The Life of an Artists," in *Roelandt Savery. Malíř ve službách císaře Rudolfa II / A Painter in the Services of Emperor Rudolf II. Katalog výstavy*, ed. Olga Kotková (Praha: Národní galerie, 2010), 46.

<sup>68</sup> Sellink, *Bruegel*, 37; compare Mia M. Mochizuki, "An Overlooked Still Life by Jacob Saverij," *Notes in the History of Art* 23, no. 4 (2004): 31; Christina Curie and Dominique Allart, *The Brueg[H]el Phenomenon. Paintings by Pieter Bruegel the Elder and Pieter Brueghel the Younger with a Special Focus on Technique and Copying Practice* (Brussels: Brepols, 2012), vol. 1, 47.

<sup>69</sup> Mayken Verhulst (Mechelen 1518–Mechelen 1600).

<sup>70</sup> Sellink, *Bruegel*, 11. Pieter Bruegel later married the daughter of Pieter Coecke, Mayken. After her death, Pieter's mother in law, Mayken Verhulst, took her grandchildren to Antwerp to teach them painting (<https://rkd.nl/en/explore/artists/13288>).

painter herself. As stated by Sellink, she taught painting to her grandson, Jan Brueghel. Savery could have been a part of that artistic circle, as he was a painter of copies of paintings by Pieter Bruegel (I), Jan's father. Due to Savery's premature death, his works are considered rare. As De Potter and De Jaegere emphasize, Savery is treated marginally by researchers, his work is discussed mainly when analysing Roelant or Pieter Bruegel<sup>71</sup>.

Irving Finkel's identification of the miniature's author's signature complements the circle of analogies described above. In turn, analyses of the workshop, which are discussed further within the article, not only placed the miniature in its milieu and period, but thanks to Finkel they could become a study of the particular artist.

The Albertina collection comprises a watercolour drawing signed „Jacus-Savery” (inv. no. 15135)<sup>72</sup>, many composition aspects of which utilised concepts akin to those implemented in Miniature 425. The trees flanking the image form semicircles, the characters are portrayed in natural poses, scenes appear as fleeting moments and the vast perspective with a distant city view is enriched by a middle ground<sup>73</sup>. Another painting of this type – a small, circular landscape drawn with a pen – that is also attributed to Jacob Savery, is a part of the collection of the Wallraf-Richartz-Museum in Cologne<sup>74</sup>.

In the small drawing *Panoramic River Landscape*<sup>75</sup> from the collection of the National Gallery in Washington, the impression of depth was emphasised by the inclusion of a meandering river and a sharp rock ledge, running at an angle at the left side of the composition's foreground; the high vantage point is located on the same level as the mountains in the background. In two drawings from The Courtauld<sup>76</sup>, *Landscape with a town* and *Landscape with two*

<sup>71</sup> De Potter and De Jaegere, “Roelant Savery,” 44.

<sup>72</sup> [https://sammlungenonline.albertina.at/?query=search=/record/objectnumbersearch=\[15135\]&showtype=record](https://sammlungenonline.albertina.at/?query=search=/record/objectnumbersearch=[15135]&showtype=record), accessed May 1, 2023.

<sup>73</sup> In this case, the paintings portray scenes of winter play on a frozen lake.

<sup>74</sup> Jacob Savery (I), *Rocky landscape of a forest with a Resting Cow and a Grazing Horse*, Wallraf-Richartz-Museum & Fondation Corboud in Cologne, inv. no. Z 1338 (<https://rkd.nl/explore/images/112518>, accessed May 1, 2023).

<sup>75</sup> Jacob Savery (I), *Panoramic river landscape*, National Gallery of Art in Washington, acc. no. 2016.101.3 (<https://www.nga.gov/collection/art-object-page.207025.html>, accessed May 1, 2023).

<sup>76</sup> Jacob Savery (I), *Landscape with a town*, Samuel Courtauld Trust in London, acc. no. D.1978.PG.31 (<https://artuk.org/discover/artworks/landscape-with-a-town-262718>, accessed May 1, 2023), *Landscape with two peasants and a dog*, Samuel Courtauld Trust in London, acc. no. D.1978.PG.317 (<https://artuk.org/discover/artworks/landscape-with-two-peasants-and-a-dog-262719>, accessed May 1, 2023).



*peasant and a dog*, once attributed to Pieter Bruegel (I), Savery used an elevated observation point. He did the same in a complex genre painting portraying a village fair, where such a view created the possibility of presenting a broad perspective of the lively diversity of the situation<sup>77</sup>. In the *Extensive Landscape with a bull hunt*<sup>78</sup>, Savery applied the same pattern of movement of the procession as in Miniature 425; in turn, the arrangement of the characters on the winding road is akin to that on a drawing from Albertina<sup>79</sup> that also includes flanking with escarpments and mountains on both sides and a distant city seen from a high viewpoint. In depicting armies and horses, Savery tended to paint them in a casual manner. Excellent scenes of this type can be seen in his *Siege of a city* from the Nationalmuseum in Stockholm<sup>80</sup> (fig. 10).

### The palette

The broad range of technological aspects of painting miniatures on parchment<sup>81</sup> originates in the tradition of creating illuminated manuscripts, where emphasis was put on the use of gold. Palette and technique<sup>82</sup> tend to be char-

<sup>77</sup> Jacob Savery (I), *Village fair*, 1598, Victoria and Albert Museum in London, acc. no. DYCE.513 (<https://collections.vam.ac.uk/item/O1026425/a-village-kermis-drawing-savery-jacob/>, accessed May 1, 2023). This painting also includes a signature written with golden paint. The author placed it on the bottom of the scene, on a rock near the edge.

<sup>78</sup> Jacob Savery (I), *Extensive landscape with a bull hunt*, private collection ([https://commons.wikimedia.org/wiki/File:Jacob\\_Savery\\_the\\_Elder\\_-\\_Extensive\\_landscape\\_with\\_a\\_bull\\_hunt.jpg](https://commons.wikimedia.org/wiki/File:Jacob_Savery_the_Elder_-_Extensive_landscape_with_a_bull_hunt.jpg), accessed May 1, 2023).

<sup>79</sup> Jacob Savery (I), *Landscape with Tobias and the Angel*, Albertina in Vienna, acc. no. 8052 ([https://sammlungenonline.albertina.at/?query=search=/record/objectnumbersearch=\[8052\]&show-type=record](https://sammlungenonline.albertina.at/?query=search=/record/objectnumbersearch=[8052]&show-type=record), accessed May 1, 2023).

<sup>80</sup> Jacob Savery (I), *Siege of a city*, Nationalmuseum in Stockholm, acc. no. NMH 167/1973.

<sup>81</sup> Elizabeth A. Carter et al., "Raman Spectroscopic Analysis of an Important Visigothic Historiated Manuscript," *Philosophical Transactions: Mathematical, Physical and Engineering Sciences* 374 (2016): no. 2082.

<sup>82</sup> After removing the miniatures from their frames, basic technological analyses were carried out. All the tests were non-destructive and did not require taking samples. They were carried out by: PhD Anna Rygula – Raman spectroscopy, Marta Matosz – macro-XRF-spectroscopy, Michał Obarzanowski – photography in diagnostic lights, PhD Zofia Maniakowska-Jazownik – micro- and macroscopic analysis, conservation treatments. Two-dimensional macro-XRF scans of the painting were carried out using an M6 Jetstream spectrometer (Bruker, DE). The instrument consists of a measuring head containing a Rh-target X-ray tube and X-Flash® silicon drift detector (SDD) mounted on an XY-motorized stage. The pixel size of the elemental maps, determined by the step size, was set to 200 µm, with the beam spot size of 200 µm. The voltage and current of the X-ray tube were set to 50 kV and 600 µA, respectively. The acquisition time was 10 ms/pixel. Micro-Raman analyses were carried out using a multichannel bench Renishaw InVia spectrometer (Renishaw, Wotton-under-Edge, UK) coupled with a Peltier-cooled CCD detector and a Leica DMLM confocal microscope. Excitation was

acteristic of the period and artistic milieu in which a given miniature was produced<sup>83</sup>. It was not unheard of for paint to be applied directly on parchment, without any priming layers; in miniatures, these additional layers were mostly applied in portraits, under the areas that faces were to be painted on<sup>84</sup>.

Savery used multi-ingredient mixtures of pigments, as well as modifications of shades with different colours<sup>85</sup>. This became apparent during our technological analyses and is compiled in a table at the end of the article (table 1).

In the miniature *Mount Golgotha*, the artist worked mainly with watercolours, on occasion using a small amount of gouache paint. Lead white was applied in the light areas of the miniature, most of which are present in the background. The artist did not use much white to lighten up pure tones, an exception being in the garments of several figures. In order to lighten up colours or to accentuate highlights, he added lead-tin-yellow and, in some regions, chalk<sup>86</sup>.

Lead-tin-yellow is a pigment characteristic for Netherlands of the 17<sup>th</sup> century<sup>87</sup>. This unique colour was applied on large areas of the exposed Mount Golgotha, on fragments of the escarpment at the bottom and top-most lights on the trees growing on the right scarp<sup>88</sup>, where it was mixed with green pigments brochantite and/or posnjakite.

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provided by the 785-nm diode laser line with an optimized laser power of about 25 mW to maximize the possible signal while avoiding damaging the object. The applied microscope objective was L50×/0.5. The appropriate positioning of the samples was carried out by automatically moving the measuring table.

<sup>83</sup> Flavia Fiorillo et al., “Non-Invasive Technical Investigation of English Portrait Miniatures Attributed to Nicholas Hilliard and Isaac Oliver,” *Heritage* 4 (2021): 1165–118, DOI: 10.3390/heritage4030064; also in Hilliard and both Oliviers: Lucia Burgio, Anna Cesaratto and Alan Derbyshire, “Comparison of English Portrait Miniatures Using Raman Microscopy and Other Techniques,” *Journal of Raman Spectroscopy* 43 (2012): 1713–1721.

<sup>84</sup> The XRF map of calcium distribution correlates with the areas of abrasion and paint loss, which reveal the parchment support containing calcium that was introduced into skin during the process of producing the parchment.

<sup>85</sup> Up to 8 pigments were identified in some of the measurement points. The average number of pigments in 26 measurement points was 4–5.

<sup>86</sup> Chalk was usually present alongside greens: brochantite –  $\text{Cu}_4(\text{SO}_4)(\text{OH})_6$ ] or posnjakite –  $\text{Cu}_4(\text{SO}_4)(\text{OH})_6 \cdot \text{H}_2\text{O}$ . The identification of lead-tin-yellow was based on XRF analyses that confirmed the presence of tin, as well as Raman spectroscopy that specified this pigment as type I lead-tin-yellow.

<sup>87</sup> Herman Kühn, “Lead-Tin Yellow,” *Studies in Conservation* 13, no. 1 (1968): 9; see also <https://www.nationalgallery.org.uk/research/about-research/the-meaning-of-making/vermeer-and-technique/vermeers-palette> (accessed April 30, 2023).

<sup>88</sup> In miniature 425, this yellow was identified in 10 measurement points out of 26. It mostly occurs interchangeably with lead white.

The element that adds most shine and splendour to compositions is of course gold. In the discussed miniature gold was added to some details, but not in a consistent manner. The largest area of its application was an intentional emphasis on the character of Longinus<sup>89</sup> (fig. 11) about to pierce Christ's side with a spear. Gold was used for the saddle pad of the Roman's horse. Other, much smaller specks of gold are present on the clothes of the foreground riders, where they were added without any clear pattern.

In the palette of reds, Savery mainly used the pigment vermillion, as well as an organic red, likely carminic acid. Vivid red details were created with a mixture of both components, while vermillion itself was added to many other colours too. An interesting solution was the modification of red shades by adding blue pigments – azurite and, in some cases, indigo. An orange shade was obtained through mixing lead-tin-yellow with vermillion, carminic acid and minium.

XRF analyses confirmed the use of one or more copper pigments on almost the entire surface of the miniature, both in blue and green areas (fig. 12). The most common pigment is azurite (lighter parts of the sky, hills in the background) and indigo (darker parts of the sky near the edges)<sup>90</sup>. Other than lead white and azurite, the pigment goethite was identified in the region of the hills, the only place where it was used. Most of the blue details were painted with indigo, sometimes mixed with azurite and additions of vermillion, green pigments, hematite and lead-tin-yellow. Malachite occurred sporadically, likely as a natural impurity of azurite rather than a product of its degradation.

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<sup>89</sup> Longinus is portrayed as a rider in Italian, Netherlandish and German tradition. Compare *Crucifixion* (1400–1424) attributed to Andrea di Bartolo from the Toledo Art Museum in Toledo (USA), inv. no. 52.103 (<https://rkd.nl/explore/images/219119>, accessed April 30, 2023); *Crucifixion* from Hans Memling's atelier, Szépművészeti Múzeum in Budapest, acc. no. 124 (<https://rkd.nl/nl/explore/images/257096>, accessed April 30, 2023); *The Crucifixion and Christ's death: Longinus piercing Christ's side* by Jan Provoost, Groeningemuseum in Bruges, inv. no. O.1661.1 (<https://rkd.nl/nl/explore/images/44361>, accessed April 30, 2); *Crucifixion* by Johann Wierix (<https://rkd.nl/nl/explore/images/24070>, accessed April 30, 2023); Maerten de Vos, *Longinus pierces Christ's side with a lance* (<https://rkd.nl/nl/explore/images/205792>, accessed April 30, 2023); Master of the Virgo inter Virgines, *Crucifixion* (<https://rkd.nl/en/explore/images/20986>, accessed April 30, 2023) etc.

<sup>90</sup> Indigo always occurred with traces of an unidentified substance, which could be an inorganic salt. It appears to be present in differing proportions, but none of the measurements showed this substance occurring separately. This fact may suggest that it is an impurity from the process of producing the pigment rather than a filler or another type of additive. The inability to identify it made it impossible to incontrovertibly determine the substance's function.

Green was obtained primarily with brochantite –  $\text{Cu}_4(\text{SO}_4)(\text{OH})_6$  and/or posnjakite –  $\text{Cu}_4(\text{SO}_4)(\text{OH})_6 \cdot \text{H}_2\text{O}$ , as identified through Raman spectroscopy<sup>91</sup>. Published research on objects from this period and region corroborates this result<sup>92</sup>.

Chalk was identified alongside the copper sulphates, probably serving the role of filler, as it was present only with this pigment. The greens were lightened up with lead-tin-yellow and lead white; other pigments that were mixed with these copper sulphates are azurite, malachite, vermilion and hematite. Aside from pure green pigments, Savery mixed azurite and lead-tin-yellow to obtain different shades of green.

An iron pigment was used to paint the felled tree on the right side of the composition, the rocks, the borders of the miniature and several smaller details (i.a. horses' coats, a bag hanging over the shoulder of a figure walking in the foreground). The pigment is likely red ochre (hematite)<sup>93</sup> and it was also modified with additions of other pigments, mainly vermilion and blues: azurite and indigo. In the brown areas, brochantite/posnjakite and lead-tin-yellow were also identified.

No separate brown pigments were detected during the analysis. Brown colours were most likely created by mixing vermilion, hematite, azurite and indigo, though it is possible that an unidentified, organic brown was used<sup>94</sup>.

As mentioned before, the composition was encircled by a characteristic two colour border. The orange-red band, painted with an iron pigment (probably ochre with vermilion), was highlighted from the inner side with a line of powder gold circa 200  $\mu\text{m}$  wide. Savery adopted this manner of enclosing miniatures from his teacher, Bol.

<sup>91</sup> The quality of the Raman spectra made it impossible to distinguish these two minerals.

<sup>92</sup> Sara Valadas et al., "On the Use of the Unusual Green Pigment Brochantite ( $\text{Cu}_4(\text{SO}_4)(\text{OH})_6$ ) in the 16<sup>th</sup>-Century Portuguese-Flemish Paintings Attributed to The Master Frei Carlos Workshop," *Microscopy and Microanalysis* 21 (2015): 518–525, DOI: 10.1017/S1431927615000094; Bernard Gilbert et al., "Analysis of Green Copper Pigments in Illuminated Manuscripts by Micro-Raman Spectroscopy," *Analyst* 128 (2003): 1213–1217, DOI: 10.1039/b306138h.

<sup>93</sup> The XRF analysis of browns (escarpment) showed large areas of iron presence. Despite this, no iron pigments were identified in those places, though hematite was found in greens and goethite in blues. Because the area of iron occurrence on the XRF map doesn't correlate with the shape of the brown scarp, the signal could have originated from the bottom layers of paint. However, this was not confirmed through Raman spectroscopy.

<sup>94</sup> The presence of an unidentified brown pigment was also noted in miniatures by Nicholas Hillard, Isaac Oliver and his son Peter Oliver. Fiorillo et al., "Non-Invasive Technical Investigation;" Burgio, Cesaratto and Derbyshire, "Comparison."

Table 1. Summary of Raman spectroscopy results: comparison of pigments present in different colours. The (v) marks signify that the pigment was detected in the regions of a given colour, but it likely came from a different area

Measurement area	Brochantite/ posnjakite	Chalk	Malachite	Azurite	Indigo	Vermilion	Carmine	Hematite	Minium	Lead-tin-yellow	Lead white
Green											
grass	v	v		v		v		v		v	
trees	v	v		v	v					v	
Blue											
hills			v	v							v
garbs	(v)	(v)		(v)	v	v		(v)		(v)	(v)
sky				v	v						v
Red											
garbs			(v)	v	(v)	v	v				v
Orange											
hat				(v)		v	v		v	v	v
White											
background (architecture)	(v)			v					(v)		v
turban	v	v	v							v	
leaves									v	v	v
Brown											
horses	v			v	v	v				v	v
rocks	v	v		v	v	v					

A possible reconstruction of the damaged paint layers of Savery's miniature was presented below. It was created in digital version only<sup>95</sup> (fig. 13).

*Translated by Magdalena Dorębska*

### **Acknowledgments**

We the authors would like to express our gratitude to Dr Irving Finkel for making a breakthrough for our research by deciphering Savery's signature.

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<sup>95</sup> Due to limiting the planned conservation treatments to the most essential processes, the reintegration was performed in a digital version only. One of the treatments which was considered necessary was replacing the thick, chipped glass that was in direct contact with the front of the miniature. The new cover was made using a convex glass 1 mm thick, which was commissioned to fit the frame. Parchment fragments that had become partially detached from the panel and a small tear in the parchment near the edge of the left side were adhered onto the wood with small amounts of starch glue. Old retouching (sky area) was not removed and no new retouching was applied. The object was placed in its frame with the new, convex glass cover. The back was secured and sealed in the frame with acid-free cardboard. The frame was then finished with a piece of bookbinding canvas that additionally secures the object. The conservation treatments were carried out by Zofia Maniakowska-Jazownik, MNK.



Fig. 1. National Museum in Kraków, inv. no. MNK III-min-425, Jacob Savery (I), *Mount Golgotha*, approximately 6 cm diameter. Photo M. Obarzanowski



Fig. 2. National Museum in Kraków, inv. no. MNK III-min-425, Jacob Savery (I), *Mount Golgotha*. Abrasions of the paint layer expose parchment fibres and lack of priming – UV induced fluorescence. Photo M. Obarzanowski





Fig. 3. National Museum in Kraków, inv. no. MNK III-min-425, Jacob Savery (I), *Mount Golgotha*. Three meandering lines of the procession in the background, with a fragment of a fourth line in the first plan. Photo M. Obarzanowski



Fig. 4. Comparison of motifs: the particularly dynamic scene of casting lots for garments  
 a – National Museum in Kraków, inv. no. MNK III-min-425, Jacob Savery (I), *Mount Golgotha*, detail; b – Kunsthistorisches Museum in Vienna, Gemäldegalerie, inv. no. 627, Jan Brueghel (I), *Crucifixion*, photo: KHM in Vienna, <https://www.khm.at/en/objectdb/detail/341/>

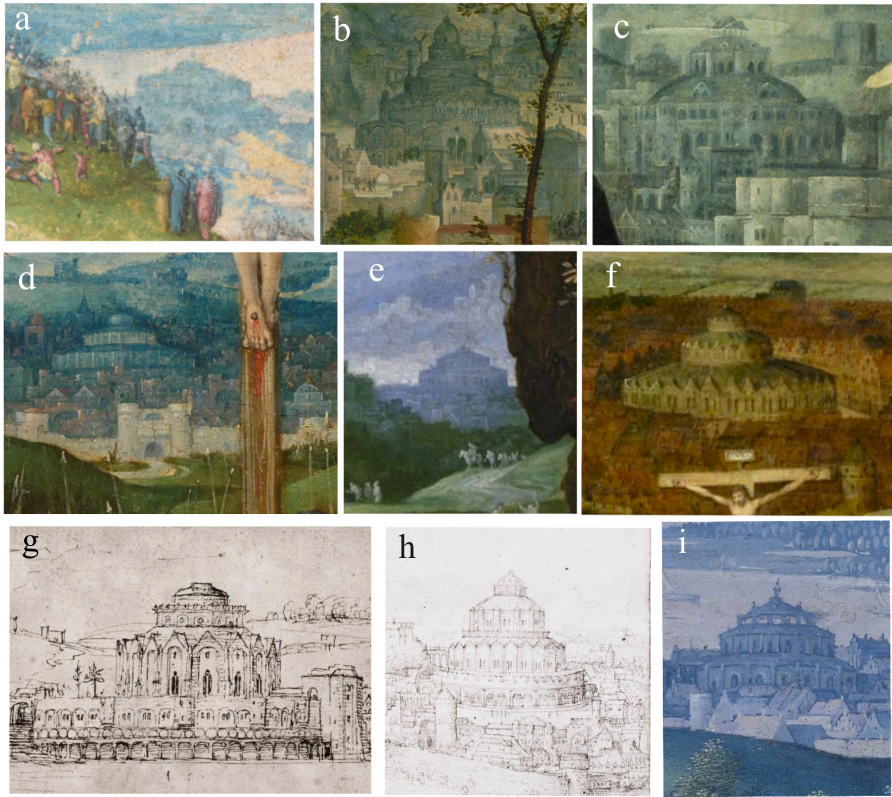


Fig. 5. Comparison of motifs: view of Jerusalem

a – National Museum in Kraków, inv. no. MNK III-min-425, Jacob Savery (I), *Mount Golgotha*, detail; b –Princeton University Art Museum, Herri met de Bles, *The road to Calvary*, 1535, photo: <https://artmuseum.princeton.edu/collections/objects/23367>; c – Muzeum Narodowe in Warsaw, inv. no. M.Ob.590 MNW, Pieter Coecke van Aelst (I) (workshop), *Crucifixion*, photo: MNW, <https://cyfrowe.mnw.art.pl/pl/katalog/506840>; d – Rijksmuseum in Amsterdam, inv. no. SK-A-1598, Pseudo Jan Wellens de Cock (attributed), *Triptych*, ca. 1525, photo: RMA, <https://www.rijksmuseum.nl/nl/collectie/SK-A-1598>; e – Kunsthistorisches Museum in Vienna, inv. no. 627, Jan Brueghel (I), *Crucifixion*, 1595, photo: KHM, <https://www.khm.at/en/objectdb/detail/341/>; f – Koninklijk Museum voor Schone Kunsten in Antwerpen, inv. no. 962, Pieter Brueghel (II), *Crucifixion*, 1615, photo: KMSKA, <http://kmska.be/collection/work/id/962>; g – Koninklijke Musea voor Schone Kunsten van België in Brussels, inv. no. 4630, fol. 125, Schetsboek, *Imaginary architecture in a landscape*, ca. 1525–1550, photo: RKD, <https://rkd.nl/explore/images/239709>; h – Kupferstichkabinett der Staatlichen Museen Preussischer Kulturbesitz in Berlin, inv. no. 79 C 2, fol. 17r, Meesters van het Antwerpse Schetsboek, *Imaginary view on Jerusalem*, photo: RKD, <https://rkd.nl/nl/explore/images/%20239316>; i – Rijksmuseum in Amsterdam, no. inv. SK-A-2117, Jacob Savery (I), *Landscape with the story of Jephthah's daughter*, photo: RMA, <https://www.rijksmuseum.nl/en/collection/SK-A-2117>

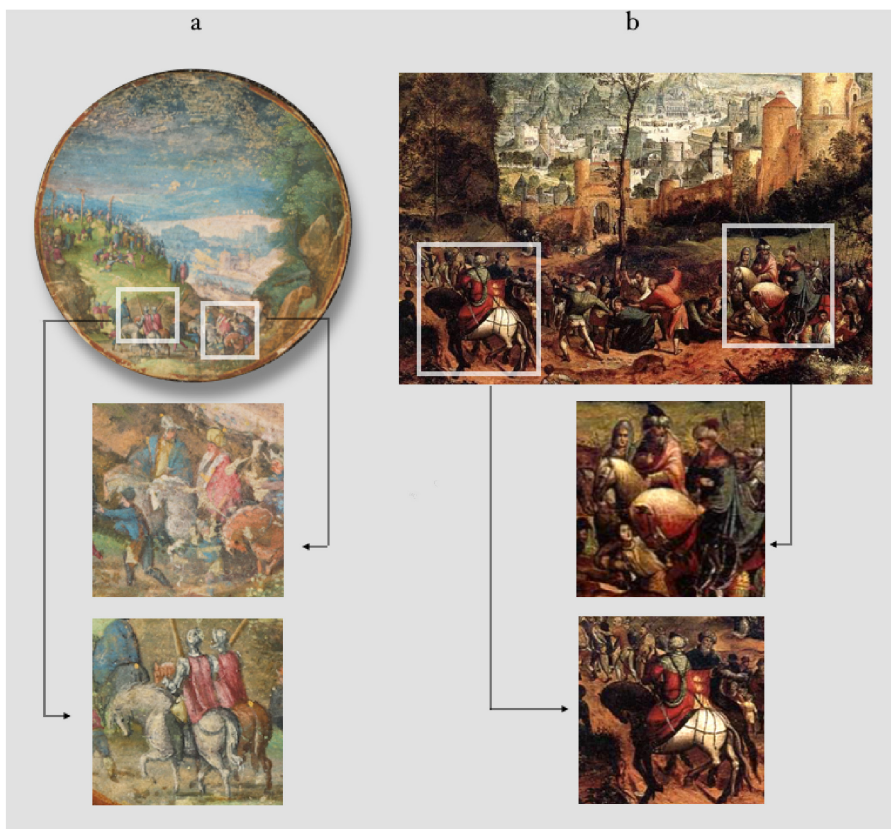


Fig. 6. Comparison of motifs  
 a – National Museum in Kraków, inv. no. MNK III-min-425, Jacob Savery (I), *Mount Golgotha*, photo M. Obarzanowski; b – Princeton University Art Museum, inv. no. y1950-1, Herri met de Bles, *The road to Calvary*, 1535, photo: <https://artmuseum.princeton.edu/collections/objects/23367>



Fig. 7. Comparison of form of a border

a – private collection, Hans Bol, *Landscape: Winter*, photo: RKD, <https://rkd.nl/explore/images/294755>; b – Markiezenhof, Hans Bol, *De Grote Markt*, source: <https://artsandculture.google.com/asset/hans-bol-de-grote-markt/mAFcl2O4UIS-jA>; c – Städel Museum in Frankfurt am Main, inv. no. 1909, Hans Bol, *Landscape with Jacob at the Well*, photo: SMF, <https://sammlung.staedelmuseum.de/en/work/landscape-with-jacob-at-the-well>; d – private collection, Hans Bol, *A landscape with travellers and a watermill*, photo: RKD, <https://rkd.nl/explore/images/290655>; e – National Museum in Kraków, miniature MNK III-min-425, photo: Z. Maniakowska-Jazownik



Fig. 8. National Museum in Kraków, inv. no. MNK III-min-425, Jacob Savery (I), *Mount Golgotha*, details: inscription with the author's signature and date. Photo M. Obarzanowski



Fig. 9. Jacob Savery's signatures with a crossed out "S"

a – Graphische Sammlung, Städelschen Kunstinstitut in Frankfurt am Main, inv. no. 2771, *Soldiers attacking peasants*, detail, photo: <https://sammlung.staedelmuseum.de/de/werk/vier-soldaten-ueberfallen-landleute>, b – private collection, *Mountainous river landscape with bridge*, detail, photo: RKD, <https://rkd.nl/nl/explore/images/231947>



Fig. 10. Comparison of motifs

a – National Museum in Stockholm, NMH 167/1973, Jacob Savery (I), *Siege of the city*, <https://collection.nationalmuseum.se:443/eMP/eMuseumPlus?service=ExternalInterface&module=collection&objectId=209329&viewType=detailView>; b – Rijksmuseum in Amsterdam, no. inv. SK-A-2117, Jacob Savery (I), *Landscape with the story of Jephthah's daughter*, photo RMA, <https://www.rijksmuseum.nl/en/search/objects?q=gouache&p=37&ps=12&st=Objects&i=9#/SK-A-2117,443>



Fig. 11. National Museum in Kraków, inv. no. MNK III-min-425, Jacob Savery (I), *Mount Golgotha*. Horse and rider distinguished by the golden saddle pad – the rider is Longinus piercing Christ's side. Gold present in the details. Visible damage to the paint layer revealing the bare parchment on the right side. Photo M. Obarzanowski

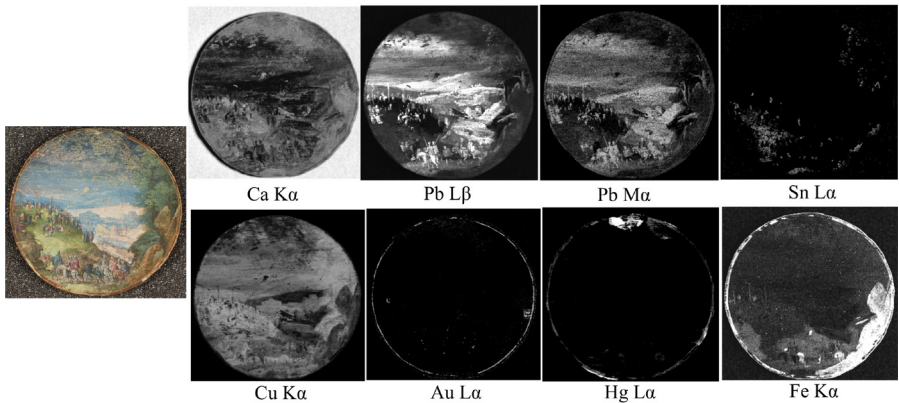


Fig. 12. National Museum in Kraków, inv. no. MNK III-min-425, Jacob Savery (I), *Mount Golgotha*. Visible light image and elemental distribution maps obtained for the miniature by means of MA-XRF imaging. Top: calcium (Ca  $K\alpha$ ), lead (Pb  $L\beta$  and Pb  $M\alpha$ ), tin (Sn  $L\alpha$ ). Bottom: copper (Cu  $K\alpha$ ), gold (Au  $L\alpha$ ), mercury (Hg  $L\alpha$ )\* (two, semicircular areas on the top of Hg map are the secondary paint spots from the reverse of miniature), iron (Fe  $K\alpha$ )



Fig.13. National Museum in Kraków, inv. no. MNK III-min-425, Jacob Savery (I), *Mount Golgotha*. Digital reintegration of miniature MNK III-min- 425, by Zofia Maniakowska-Jazownik

## References

### Publications

- Burgio, Lucia, Cesaratto Anna, and Derbyshire Alan. "Comparison of English Portrait Miniatures Using Raman Microscopy and Other Techniques." *Journal of Raman Spectroscopy*, 43 (2012): 1713–1721.
- Carter, Elizabeth A., Fernando Rull Perez, Jesús Medina Garcia, and Howell G. M. Edwards. "Raman Spectroscopic Analysis of an Important Visigothic Historiated Manuscript." *Philosophical Transactions: Mathematical, Physical and Engineering Sciences* 374 (2016): no. 2082.
- Curie, Christina, and Dominique Allart. *The Brueg[H]el Phenomenon. Paintings by Pieter Bruegel the Elder and Pieter Brueghel the Younger with a Special Focus on Technique and Copying Practice*. Vol. 1–2. Brussels: Brepols, 2012.
- De Coster, Sylvie. "Vlijtich, net en met grooter patientie. Nieuwe aanwinst van Jacob I Savery in het Broelmuseum." In *Handelingen Nieuwe Reeks*, vol. 77, ed. Filippe de Potter, 87–105. Kortrijk: Koninklijke Geschied- en Oudheidkundige Kring van Kortrijk, 2012.
- De Potter, Filippe, and Isabelle De Jaegere. "Roelant Savery: Život umělce / Roelant Savery: The Life of an Artists." In *Roelandt Savery. Malíř ve službách císaře Rudolfa II / A Painter in the Services of Emperor Rudolf II. Katalog výstavy*, ed. by Olga Kotková, 11–56. Praha: Národní galerie, 2010.
- Fiorillo, Flavia, Lucia Burgio, Christine Slottved Kimbriel, and Paola Ricciardi, "Non-Invasive Technical Investigation of English Portrait Miniatures Attributed to Nicholas Hilliard and Isaac Oliver." *Heritage* 4 (2021): 1165–118. DOI: 10.3390/heritage4030064.
- Gerszi, Teréz. "Bruegels Nachwirkung auf die niederländischen Landschaftsmaler um 1600." *Oud Holland* 90, no. 4 (1976): 201–229.
- Gibson, Walter S. *Mirror of the Earth: The World Landscape in Sixteenth-Century Flemish Painting*. Princeton: Princeton University Press, 1989.
- Gilbert, B., S. Denoël, G. Weber, and D. Allart. "Analysis of Green Copper Pigments in Illuminated Manuscripts by Micro-Raman Spectroscopy." *Analyst* 128 (2003): 1213–1217. DOI: 10.1039/b306138h.
- Gołyźniak, Paweł. *Ancient Engraved Gems in the National Museum in Krakow*. Wiesbaden: Reichert, 2017.
- Hautekeete, Stefaan. "New Insights into the Working Methods of Hans Bol." *Master Drawings* 50, no. 3: South Netherlandish & Flemish Drawings, part I (Autumn 2012): 329–356.
- Hautekeete, Stefaan, and Joris van Girieke. *Emblemata Evangelica. Hans Bol*. Brussels: Koning Boudewijnstichting, 2015.



- “Joachim Patinir (c. 1480–1524).” In *Renaissance and Reformation, 1500–1620: A Biographical Dictionary*, ed. by Jo Eldridge Carney, 280. Westport: Greenwood Publishing Group, 2001.
- Katalog przedmiotów ofiarowanych przez Konstantego Schmidta-Ciążyńskiego do Muzeum Narodowego w Krakowie*. Kraków: Muzeum Narodowe w Krakowie / Drukarnia Związkowa, 1885.
- Kühn, Herman. “Lead-Tin Yellow.” *Studies in Conservation* 13, no. 1 (1968): 7–33.
- Mander, Carel van. *Het schilder-boeck waerin voor eerst de leerlustighe iueght den grondt der edel vry schilderconst in verscheyden deelen wort voorghedraghen...* Haarlem: Paschier van Wesbvsch Boeck vercooper, 1604.
- Maniakowska-Jazownik, Zofia, Anna Ryguła, and Marta Matosz. “Around the Set of Early-Modern Miniatures Painted on Parchment Donated by Konstanty Schmidt-Ciążyński in the Collection of the National Museum in Kraków.” *Acta Universitatis Nicolai Copernici. Zabytkoznawstwo i Konserwatorstwo* 53 (2022): 183–230. DOI: 10.12775/AUNC\_ZiK.2022.005.
- Mielke, Ursula, and Stefaan Hautekeete. *Hans Bol*, part 1–2 (New Hollstein, Dutch and Flemish Etchings, Engravings and Woodcuts, 1450–1700, 28). Amsterdam: Ger Luiten, 2015.
- Mochizuki, Mia M. “An Overlooked Still Life by Jacob Saverij.” *Notes in the History of Art* 23, no. 4 (2004): 25–37.
- Montias, John Michael. *Art at Auction in 17<sup>th</sup> Century Amsterdam*. Amsterdam: Amsterdam University Press, 2002. Online edition. DOI: 10.5117/9789053565919. <https://library.oapen.org/handle/20.500.12657/35108>. Accessed January 20, 2022.
- Powell, Amy Knight. “Squaring the Circle: The Telescopic View in Early Modern Landscapes.” *Art History* 39, Issue 2 (2016): 282–301.
- Sellink, Manfred. *Bruegel. The Complete Paintings, Drawing and Prints*. Ghent: Ludion Press, 2007.
- Thieme, Ulrich, and Felix Becker. *Allgemeines Lexikon der bildenden Künstler von der Antike bis zur Gegenwart*. Vol. 29 Rosa–Scheffauer. Ed. by Hans Vollmar. Leipzig: E. A. Seemann, 1935.
- Tobiaszowa, Zofia. “Historia zbioru miniatur Muzeum Narodowego w Krakowie.” *Rozprawy Muzeum Narodowego w Krakowie* 7 (1962): 288–312.
- Valadas, Sara, Rita V. Freire, Ana Cardoso, José Mirão, Cristina B. Dias, Peter Vandenaabeele, and António Candeias. “On the Use of the Unusual Green Pigment Brochantite (Cu<sub>4</sub>(SO<sub>4</sub>)(OH)<sub>6</sub>) in the 16<sup>th</sup>-Century Portuguese-Flemish Paintings Attributed to The Master Frei Carlos Workshop.” *Microscopy and Microanalysis* 21 (2015): 518–525. DOI: 10.1017/S1431927615000094.
- Winiewicz-Wolska, Joanna. *Malarstwo niderlandzkie i flamandzkie w zbiorach Zamku Królewskiego na Wawelu*. Kraków: Wydawnictwo Wawelskie, 2021.

## Internet sources

### Documentation of artworks

Amsterdam, Rijksmuseum. Accessed April 30, 2023.

Bol Hans, *Abduction of Europe*, 1585, <https://www.rijksmuseum.nl/en/collection/RP-T-1919-15>.

Bol Hans, *Small tondo paintings of the twelve months*, designed by Adrien Collaert, <https://www.rijksmuseum.nl/en/rijksstudio/11025--Adrian-Thyssen/collections/hans-bol-all-the-year-round?ii=0&p=0>.

van Oostanen Jacob Cornelisz, *The Crucifixion*, <https://www.rijksmuseum.nl/en/collection/SK-A-1967>.

Antwerp, Koninklijk Museum voor Schone Kunsten. Accessed April 30, 2023.

Breughel Pieter (II), *Calvary*, <https://kmska.be/en/masterpiece/calvary-11>.

Artnet. Accessed April 30, 2023.

Savery Jacob (I), *Battle Between the Israelites and the Hordes of Amalek*, <https://www.artnet.com/artists/jacob-savery-the-elder/the-battle-between-the-israelites-and-the-hordes-3ON6TCwJr60TDnl72ovWIg2>.

Bergen, Markiezenhof. Accessed April 30, 2023.

Bol Hans, *The Markiezenhof in Bergen op Zoom*, <https://www.markiezenhof.nl/over-ons/nieuws/markiezenhof-in-google-art-project>.

Budapest, Szépművészeti Múzeum. Accessed April 30, 2023.

Breughel Pieter (II), *The Crucifixion or The Calvary*, <https://www.mfab.hu/artworks/the-crucifixion-7/>.

Christie's auctions. Accessed April 30, 2023.

Jan Brueghel (I), *Travelers in a forest overlooking a castle and a wide valley*, [https://www.christies.com/img/LotImages/2019/PAR/2019\\_PAR\\_16827\\_0039\\_000\(jan\\_brueghel\\_lancier\\_dit\\_brueghel\\_de\\_velours\\_voyageurs\\_dans\\_une\\_foret\).jpg](https://www.christies.com/img/LotImages/2019/PAR/2019_PAR_16827_0039_000(jan_brueghel_lancier_dit_brueghel_de_velours_voyageurs_dans_une_foret).jpg)

Cleveland, The Cleveland Museum of Art. Accessed April 30, 2023.

van Coninxloo Gillis, *Landscape with Venus and Adonis*, <https://www.clevelandart.org/art/1962.293>.

Goltzius Hendrick, *The Passion: Christ of the cross between the two thieves*, <https://www.clevelandart.org/art/1923.762.10>.

van Leyden Lucas, *The Round Passion*, <https://www.clevelandart.org/art/collection/search?search=1923.746&filter-include-parts=1>.

Master of Otto van Moerdrecht, leaf from a Missal: *The Crucifixion*, <https://www.clevelandart.org/art/1959.254>.

Dresden, Staatliche Kunstsammlungen. Accessed April 30, 2023.

Bruegel Pieter (I), *Road to Emaus*, <https://skd-online-collection.skd.museum/Details/Index/912928>.

van Coninxloo Gillis, *Wide mountain landscape with fortress town in the middle ground*, <https://skd-online-collection.skd.museum/Details/Index/891281>.

van Coninxloo Gillis, *Large landscape with Abraham's sacrifice*, <https://skd-online-collection.skd.museum/Details/Index/981764>.

van Coninxloo Gillis, *The finding of Moses*, <https://skd-online-collection.skd.museum/Details/Index/981937>.

van Leyden Lucas, *Return of the Prodigal Son*, <https://skd-online-collection.skd.museum/Details/Index/887911>.

Frankfurt am Main, Graphische Sammlung Städel Museum. Accessed April 30, 2023.

Savery Jacob (I), *Four soldiers attack country folk going to market, wheel and gallows in the background*, <https://sammlung.staedelmuseum.de/en/work/vier-soldaten-ueberfallen-landleute>.

de Vos Maerten, *Longinus pierces Christ's side with his lance*, <https://rkd.nl/nl/explore/images/205792>.

Hague, Mauritshuis. Accessed April 30, 2023.

Bol Hans, *Imaginary landscape with St. John on Patmos*, <https://www.mauritshuis.nl/en/our-collection/artworks/1043-imaginary-landscape-with-st-john-on-patmos/>.

Bril Paul, *Mountainous landscape with Saint Jerome*, <https://www.mauritshuis.nl/en/our-collection/artworks/1204-mountainous-landscape-with-saint-jerome/>.

Brueghel Jan (I) & Hans Rottenhammer, *Rest on the flight into Egypt*, <https://www.mauritshuis.nl/en/our-collection/artworks/283-rest-on-the-flight-into-egypt/>.

van den Berghe Christoffel, *Summer landscape*, <https://www.mauritshuis.nl/en/our-collection/artworks/672-summer-landscape/>.

Landover, National Gallery of Art. Accessed April 30, 2023.

Savery Jacob (I), *Panoramic river landscape*, <https://www.nga.gov/collection/art-object-page.207025.html>.

London, British Museum. Accessed April 30, 2023.

van Aelst Pieter Coeck, *Ces moeurs & fachons de faire de Turcz avecq'les Regions y appartenantes, ont este au vif contrefaictes par Pierre Coecke van Alost, l'An de Jesu Christ M.D.33, Lequel aussy de sa main propre a pourtraict ces figures duysantes à l'impression d'ycelles*, [https://www.britishmuseum.org/collection/object/P\\_E-6-1-7](https://www.britishmuseum.org/collection/object/P_E-6-1-7).

London, Samuel Courtauld Trust. Accessed April 30, 2023.

Savery Jacob (I), *Landscape with a town*, <https://artuk.org/discover/artworks/landscape-with-a-town-262718>.

Savery Jacob, *Landscape with two peasants and a dog*, <https://artuk.org/discover/artworks/landscape-with-two-peasants-and-a-dog-262719>.

London, Victoria and Albert Museum. Accessed April 30, 2023.

Savery Jacob (I), *Village fair*, <https://collections.vam.ac.uk/item/O1026425/a-village-kermis-drawing-savery-jacob/>.

Munich, Alte Pinakothek. Accessed April 30, 2023.

Memling Hans, *Seven Joys of Mary*, <https://www.sammlung.pinakothek.de/en/artwork/k2xnBroxPd>.

Nederlands Instituut voor Kunstgeschiedenis – RKD. Accessed April 30, 2023.

di Bartolo Andrea (attributed), *Crucifixion*, Toledo Museum of Art, <https://rkd.nl/explore/images/219119>.

met de Bles Herri (circle), *Christ bearing the Cross*, Paris/New York, art dealer F. Kleinberger, <https://rkd.nl/en/explore/images/67981>.

Boels Frans, *Extensive landscape with peasants merrymaking*, private collection, <https://rkd.nl/explore/images/277710>.

Bol Hans, *An extensive landscape with shepherds and their flock, a coastal town beyond*, Christie's (London), <https://rkd.nl/explore/images/62264>.

Bol Hans, *Autumn*, ca. 1586, Bassenge (Berlin), <https://rkd.nl/explore/images/303086>.

Bol Hans, *Elegant hunting party before the Abbey of Rouge-Cloître*, Sotheby's (London), <https://rkd.nl/explore/images/280348>.

Bol Hans, *Imaginary view of Anwerp, left fight*, Paris / New York, Habolt & Co, <https://rkd.nl/explore/images/117133>.

Bol Hans, *Mountainous river landscape with Mercury on the right with the severed head of Argus and Io turned into a white cow; on the left, Juno sets Argus' eyes on the tail of her peacock*, Sotheby's (London), <https://rkd.nl/explore/images/49436>.

Bol Hans, *Panoramic landscape with the prophet of Judah riding off with his donkey and on his way getting killed by a lion*, <https://rkd.nl/en/explore/images/103227>.

Bol Hans, *Summer*, Bassenge (Berlin), <https://rkd.nl/explore/images/303085>.

Brueghel Pieter (II) and Joos de Momper (II), *The crucifixion (Golgotha) in a vast landscape*, Koller (Zürich), <https://rkd.nl/explore/images/210641>.

Coecke van Aelst (I) Pieter, *Carrying the Cross*, Bonn, Landesmuseum, <https://rkd.nl/explore/images/239903>.

Coecke van Aelst Pieter (circle), *Crucifixion*, Christie's, <https://rkd.nl/explore/images/227187>.

Coecke van Aelst Pieter (I), *Christ carrying the Cross*, Basel, Kunstmuseum, <https://rkd.nl/explore/images/239898>.

van Eyck brothers (circle), *Landscape with carrying the Cross*, Budapest, Szépművészeti Múzeum, <https://rkd.nl/explore/images/56013>, <https://rkd.nl/explore/images/56013>.

van Eyck Jan, *Christ carrying the Cross*, Vienna, Graphische Sammlung, inv./cat. no. 3025, cat. Benesch 1928, p. 4, no. 22, <https://rkd.nl/explore/images/21495>.

Kempener Pieter, *Crucifixion scene*, Prague, Národní galerie, <https://rkd.nl/explore/images/286144>.

Massijs Quinten (I), *Crucifixion*, Ottawa, National Gallery of Canada, <https://rkd.nl/en/explore/images/54878>.

Massijs Quinten (I) and workshop, *The Triptych with Crucifixion*, Antwerp, Mayer van den Bergh Museum, inv./cat.nr 362, <https://rkd.nl/explore/images/44357>.

Massijs Cornelis, *Road to Calvary*, private collection, <https://rkd.nl/explore/images/51736>.

Massijs Cornelis (attributed), *Road to Calvary*, Brussels, Koninklijke Musea voor Schone Kunsten van België, <https://rkd.nl/explore/images/51737>.

Massijs Cornelis (circle), *Fortified town in a rocky landscape*, private collection, <https://rkd.nl/explore/images/262358>.

Master of de Virgo Inter Virgines, *Crucifixion*, Madrid, Museo Thyssen-Bornemisza, <https://rkd.nl/en/explore/images/20986>.

Masters of the Antwerp Sketchbook

*Imaginary architecture in a landscape*, Brussels, KMSKB, inv./cat. no. 4630, fol. 125, <https://rkd.nl/explore/images/239709>.

*Imaginary architecture in a hilly landscape*, Berlin, Kupferstichkabinett der Staatlichen Museen zu Berlin, <https://rkd.nl/explore/images/239501>.

*Imaginary view of Jerusalem*, Berlin, Kupferstichkabinett der Staatlichen Museen zu Berlin, <https://rkd.nl/explore/images/239316>.

Fragment of a *Christ bearing the cross*, Berlin, Kupferstichkabinett der Staatlichen Museen zu Berlin, <https://rkd.nl/explore/images/239348>.

Master of the Legend of St Ursula, *The Crucifixion*, Raleigh, North Carolina Museum of Art, <https://rkd.nl/explore/images/116945>.

Patinir Joachim (manner), *Landscape with the Way of the Cross*, Sotheby's (London), <https://rkd.nl/explore/images/52098>.

Provoost Jan, *The Crucifixion and Christ's death: Longinus piercing Christ's side*, Bruges, Groeningemuseum, <https://rkd.nl/en/explore/images/44361>.

Savery Jacob (I), *Rocky landscape of a forest with a resting cow and a grazing horse*, Cologne, The Wallraf-Richartz Museum & Fondation Corboud, inv./cat. no. Z 1338, <https://rkd.nl/explore/images/112518>.

van Valckenborch Lucas,

*Mountainous landscape with a hunter*, Phillips Auctioneers (London), <https://rkd.nl/explore/images/47463>.

*Mountainous landscape*. Sotheby's (London), accessed April 30, 2023, <https://rkd.nl/explore/images/52098>.

de Vos Maerten (workshop), *Crucifixion with Mary Magdalene*, London, Dulwich Picture Gallery, <https://rkd.nl/explore/images/64922>.

Wierix Johann, *Crucifixion*, Vienna, Albertina, <https://rkd.nl/nl/explore/images/24070>.

New York, the Metropolitan Museum of Art. Accessed April 30, 2023.

*Diptych of the Passion of Christ*, <https://www.metmuseum.org/art/collection/search/464268>.

Dürer Albrecht, *Crucifixion*, <https://www.metmuseum.org/art/collection/search/391226>.

van Eyck Jan, *Crucifixion and Last Judgement diptych*, <https://www.metmuseum.org/art/collection/search/436282>.

Gossaert Jan, *Christ carrying the Cross*, <https://www.metmuseum.org/art/collection/search/439977>.

van Leyden Lucas, *Golgotha*, <https://www.metmuseum.org/art/collection/search/364784?searchField=All&sortBy=Relevance&deptids=9&when=A.D.+1400-1600&where=Netherlands&ft=lucas+van+leyden&offset=0&rpp=80&pos=72>.

van Meckenem Israhel, *Six roundel patterns for a goldsmith: the Coronation of the Virgin, God the Father with the Body of Christ, St. Eustace or St. Hubert, the Conversion of St. Paul, Charlemagne and St. Helen, and St. Elizabeth*, <https://www.metmuseum.org/art/collection/search/627260>.

Paris, Musée du Louvre. Accessed April 30, 2023.

*Pendants with scenes from Christ's life: Crucifixion, Descent from the Cross*, <https://collections.louvre.fr/en/ark:/53355/cl010104826>, <https://collections.louvre.fr/en/ark:/53355/cl010096779>.

Memling Hans, *Flight into Egypt*, <https://collections.louvre.fr/en/ark:/53355/cl010063999>.

Memling Hans, *The Resurrection Triptych*, <https://collections.louvre.fr/en/ark:/53355/cl010061675>.

Princeton, Princeton University Museum of Art. Accessed April 30, 2023.

met de Bles Herri, *Road to Calvary*, <https://artmuseum.princeton.edu/collections/objects/23367>.

Raleigh, North Carolina Museum of Art. Accessed April 30, 2023.

Memling Hans, *The Crucifixion*, <https://ncartmuseum.org/object/the-crucifixion/>.

Rotterdam, Museum Boijmans Van Beuningen. Accessed April 30, 2023.

Bol Hans, *Landscape with the parable of the Good Samaritan*, <https://www.boijmans.nl/en/collection/artworks/73246/landscape-with-the-parable-of-the-good-samaritan>.

van Coninxloo Gillis, *Mountainous landscape*, <https://www.boijmans.nl/en/collection/artworks/113193/mountainous-landscape/>.

Sotheby's auctions. Accessed April 30, 2023.

Savery Jacob (I), *Extensive landscape with a bull hunt*, <https://www.sothebys.com/en/auctions/ecatalogue/2019/old-master-day-119034/lot.138.html>.

Stockholm, Nationalmuseum. Accessed April 30, 2023.

Boels Frans, *Autumn*, <http://collection.nationalmuseum.se/eMP/eMuseumPlus?service=ExternalInterface&module=collection&objectId=23943&viewType=detailView>.

Boels Frans, *Spring*, <http://collection.nationalmuseum.se/eMP/eMuseumPlus?service=ExternalInterface&module=collection&objectId=23941&viewType=detailView>.

Boels Frans, *Summer*, <http://collection.nationalmuseum.se/eMP/eMuseumPlus?service=ExternalInterface&module=collection&objectId=23942&viewType=detailView>.

Boels Frans, *Winter*, <http://collection.nationalmuseum.se/eMP/eMuseumPlus?service=ExternalInterface&module=collection&objectId=23944&viewType=detailView>.

Torino, Musei Reali Torino, Galleria Sabauda. Accessed April 30, 2023.

Memling Hans, *Passion of Christ*, [https://museireali.beniculturali.it/catalogo-galleria-sabauda/#/dettaglio/137948\\_Passione%20di%20Cristo](https://museireali.beniculturali.it/catalogo-galleria-sabauda/#/dettaglio/137948_Passione%20di%20Cristo).

Vienna, Albertina. Accessed April 30, 2023.

Savery Jacob (I), *Mountain landscape with resting muleteers and a view of a river valley*, [https://sammlungenonline.albertina.at/?query=search=/record/objectnumbersearch=\[8045\]&showtype=record](https://sammlungenonline.albertina.at/?query=search=/record/objectnumbersearch=[8045]&showtype=record).

Savery Jacob (I), *Winter landscape near Amsterdam*, [https://sammlungenonline.albertina.at/?query=search=/record/objectnumbersearch=\[15135\]&showtype=record](https://sammlungenonline.albertina.at/?query=search=/record/objectnumbersearch=[15135]&showtype=record).

Savery Jacob (I), *Landscape with Tobias and the angel*, [https://sammlungenonline.albertina.at/?query=search=/record/objectnumbersearch=\[8052\]&showtype=record](https://sammlungenonline.albertina.at/?query=search=/record/objectnumbersearch=[8052]&showtype=record).

van Valckenborch Lucas, *Linz, seen from the Pöstlingberg mountain*, Graphische Sammlung, <https://rkd.nl/explore/images/22987>.

Wierix Johann, *Christ carrying the cross*, [https://sammlungenonline.albertina.at/?query=search=/record/objectnumbersearch=\[7570\]&showtype=record](https://sammlungenonline.albertina.at/?query=search=/record/objectnumbersearch=[7570]&showtype=record).

Vienna, Kunsthistorisches Museum. Accessed April 30, 2023.

Brueghel Jan (I), *Crucifixion*, <https://www.khm.at/en/objectdb/detail/341/?offset=4&lv=list>.

Savery Jacob (I), *Landscape with Tobias and the Archangel Raphael on a journey*, inv. no. GG 952 <https://www.khm.at/objektdb/detail/2185/>

Warsaw, Muzeum Narodowe. Accessed April 30, 2023.

*The Jerusalem Triptych*, <https://cyfrowe.mnw.art.pl/pl/katalog/543710>.

Coecke van Aelst's Pieter (I) (circle), *Crucifixion*, <https://cyfrowe.mnw.art.pl/pl/katalog/506840>.

Washington, National Gallery of Art. Accessed April 30, 2023.

Savery Jacob (I), *Panoramic river landscape*, <https://www.nga.gov/collection/art-object-page.207025.html>.

### Others

Jan Brueghel the Elder. *Complete catalog*. Accessed April 30, 2023. <https://www.jan-brueghel.net>.

London, National Gallery. Howard Helen. *Vermeer's Palette*. Accessed April 30, 2023.

<https://www.nationalgallery.org.uk/research/about-research/the-meaning-of-making/vermeer-and-technique/vermeers-palette>.

Nederlands Instituut voor Kunstgeschiedenis. RKD. Artists' biographic entries. Accessed April 30, 2023.

Brueghel Jan (I), <https://rkd.nl/en/explore/artists/13288>.

Savery Jacob, <https://rkd.nl/explore/artists/69908>.