

Report on the Domitian Painting

1. Introduction and Scope

This report summarises and synthesises the **technical, stylistic, and historical evidence** currently available for the painting of **Emperor Domitian**, traditionally associated with the Gonzaga/Titian Caesar series and more recently linked to the name “**L da Vinci**” through an old inscription.

The objectives are to:

1. Establish the **age and originality** of the painting.
2. Characterise the **materials and techniques** used.
3. Evaluate the “**L da Vinci**” **inscription**.
4. Reconstruct the **probable provenance**.
5. Situate the painting within its **art-historical context** and assess possible connections to **Leonardo’s circle or workshop tradition**.

2. Support and Construction

2.1 Canvas type and structure

The painting is executed on a **linen canvas**, later **lined**. Technical examination describes the original support as a **plain-weave fabric**, consistent with Italian practice.

Canvas as a support was used in Italy from the 14th century but remained **relatively rare** through much of the 15th century, gaining broader acceptance towards its end and into the 16th century, especially in northern regions. Panel painting still dominated major commissions. The presence of a linen canvas is therefore **fully compatible with a late 15th- or early 16th-century north-Italian context**, while offering no support for a much later, cheap copy.

2.2 Radiocarbon dating

Radiocarbon (^{14}C) analysis of the canvas, carried out at the **Tandem Laboratory, Uppsala University**, indicates with highest probability that the fabric dates to the **late 15th century**, with the calibration curve peaking around **c. 1470 CE**.

Implications:

- The canvas **cannot plausibly be of 17th-19th-century origin**.
- The dating fits comfortably within **Leonardo da Vinci’s lifetime (1452-1519)**.
- It also predates **Titian’s commission and execution of the eleven Caesars, c. 1536-1540**.
- The support is thus **authentically Renaissance**, not a later substitution for a copy.

3. Pigments and Layer Structure

3.1 Overview of pigments

Raman spectroscopy, supported by other analytical methods, has identified **14 pigments** in the painting. Of these, **12 pigments are fully consistent with 15th-early 16th-century use**. Two modern pigments (notably **Prussian blue** and **titanium white**) occur only in areas that can be associated with **later retouchings and overpaints**, not within the original paint layers.

Original pigments include, among others:

- -----
- -----
- -----
- -----
- -----
- -----
- -----
- -----
- -----
- To view the identified pigments, please visit:
<https://chemrxiv.org/doi/full/10.26434/chemrxiv-2026-1mp5h>

These findings confirm that the **original palette** is consistent with **Renaissance practice**, while modern materials are confined to restoration.

3.2 Area H - armour, grey-blue metallic passage

Area **H** on the armour, visually a **grey-blue metallic passage**, was selected for more detailed pigment and microstructural study.

Pigments identified in H include:

- -----
- -----
- -----
- -----
- -----
- -----
- To view the identified pigments, please visit:
<https://chemrxiv.org/doi/full/10.26434/chemrxiv-2026-1mp5h>

Microscopic appearance (after partial cleaning, 2021):

- The cleaned paint surface presents a **light/white matrix** dominated by -----.
- Within this matrix one observes discrete, non-homogenised particles of:
 - **white**,
 - **blue**,
 - **yellow / orange-yellow**,
 - **red**,
 - **green**,
 - and **black** pigments,together with the ----- component.

Interpretation:

The grey-blue tone of the armour in H is therefore **not** a single mixed paint (e.g. “grey” or “blue”), but an **optically constructed colour field**:

- A **light, reflective** ----- **matrix** provides body and luminosity.
- ----- shifts the tone towards blue.
- ----- and the brown earth pigment subtly adjust hue and value.
- ----- deepens shadows and models form.
- ----- and ----- contribute microscopic warm accents, giving the metal surface a lively optical vibration.

This is a **sophisticated Renaissance technique**, treating colour as a **function of light, transparency, and optical mixture** rather than as a simple local tone. On this level of method, it is comparable (although serving a different pictorial function) to the way technical studies describe Leonardo’s handling of subtle cool tones in **The Virgin and Child with Saint Anne**, where a nearly white layer carries scattered microscopic blue and other chromatic particles to achieve atmospheric effects.

4. Pentimenti and Originality

4.1 Documented pentimenti

Conservators have identified several significant **pentimenti** - changes made during the creative process - including:

- The **head** reduced in size relative to an earlier state.
- Alterations to the **profile**, including forehead and nose outline.
- The **nose** made more crooked; initially straighter.
- The **left shoulder** shifted downwards.
- The **baton** initially larger and subsequently reduced in length and thickness.
- Evidence that the figure was originally conceived with **longer hair**, with changes to the **back of the head and neck**.

These pentimenti are supported by X-ray imaging, which reveals underpainting and earlier shapes beneath the visible surface.

4.2 Expert opinion

Art expert **Anna Bronzoni Catellani** encapsulates their significance:

“There are no indications in the original paint layer that the painting is a copy. On the contrary, several pentimenti appear that clearly testify to a creative process, something that is normally missing in copies.”

This is a strong statement. Pentimenti of this sort are among the clearest indicators that:

- the painting is a **creative original**, not a mechanical reproduction;
- the artist was **developing the composition directly on the canvas**, correcting and refining;
- it is **unlikely** to be a simple copy or a later workshop replica.

5. X-ray, UV and IR Findings

5.1 X-ray imaging

X-radiographs reveal:

- Variations and reworking in the **laurel wreath** and hair masses.
- Earlier positions and forms of the **baton**.
- Adjustments to parts of the **armour** and figure outline.
- Areas of structural disturbance, fills, and older restoration.

The X-rays confirm:

- The presence of an **understructure** and **revisions**, aligning with the observed pentimenti.
- The absence of a mere traced copy after another painting or print.
- A history of **substantial, pre-modern damage and restoration**.

5.2 UV fluorescence

UV examination shows:

- A relatively uniform layer of **aged natural-resin varnish**, fluorescing milky blue.
- **Dark spots and patches** indicating retouchings and losses.
- Around the **signature area** beneath the right elbow, the varnish appears consistent and aged, with **no local disturbances** suggesting late insertion of the inscription.

5.3 IR reflectography

IR reflectography:

- Emphasises retouches and some subsurface features.
- Does not reveal an extensive carbon-based underdrawing, which is not unusual for an artist painting largely directly onto a prepared ground.
- Confirms that the **signature area has not been reworked in modern times**.

6. The “L da Vinci” Inscription

6.1 Stratigraphic position and condition

Technical examination of the inscription “**L da Vinci**” finds that:

- It is executed in a dark paint.
- It lies **below** the aged natural-resin varnish, as demonstrated by UV imaging.
- The area has **not been opened and re-varnished** in a way that would allow a modern addition beneath the current varnish.
- The paint of the inscription shares ageing characteristics and craquelure consistent with old layers.

6.2 Interpretation of the inscription

The stratigraphy shows clearly that the inscription is **not a modern forgery** painted on top of recent varnish. It must be considered an **old inscription**, likely applied several centuries ago.

Comparisons with securely documented signatures by **Leonardo da Vinci** on drawings and documents indicate:

- Leonardo did sometimes sign in forms comparable to “**L da Vinci**”, but
- the precise letterforms here do not allow a confident identification as **autograph**, especially given the absence of a clear documentary trail.

The most responsible conclusion is that:

- The inscription represents an **early attribution to Leonardo**, or use of his name, rather than a guaranteed autograph signature.
- It carries genuine historical weight and cannot be dismissed as a late, opportunistic addition.

In short, the painting bears a **historically old “L da Vinci” inscription beneath aged varnish**, which must be included in any serious attribution discussion.

7. Condition, Damage and Restorations

7.1 Structural damage

Conservation has revealed:

- The canvas has been **folded along several lines**, causing breaks in the paint film.
- The central parts of the composition (torso, mid-zone) exhibit extensive **losses**, old fills and overpaints.
- These patterns are typical of an artwork that has been:
 - removed from its frame,
 - **folded, rolled or compressed**,
 - then re-stretched and restored.

This type of damage is consistent with **17th-18th-century crises** - such as war, sales of royal collections, or evacuation from fires - and is less compatible with a quietly preserved 19th-century imitation.

7.2 Surface condition

The visible surface must be interpreted with care because the painting has been examined and photographed at **different stages of conservation**.

A photograph of **area H** taken in **2021**, before the final restoration campaign of **2025**, shows the same location from which the Raman samples were taken. At that stage, a small test area of approximately **20 x 20 mm** was partially cleaned in order to remove the old varnish and

thereby facilitate Raman sampling. This is why the 2021 image shows a partly cleaned zone alongside surrounding areas still covered by aged varnish.

Accordingly:

- the **greenish cast** visible in the uncleaned parts of that 2021 image should not be interpreted as part of the original paint structure; it is mainly due to the **old varnish layer** remaining outside the cleaned test area
- the **cleaned test area** in that same image provides the relevant visual basis for comparison with the Raman results from area H
- in photographs taken **after the 2025 restoration**, the old varnish has been removed, and this varnish-related discoloration is no longer present

For this reason, stylistic and technical interpretation of area H should be based primarily on the **cleaned 2021 test area** together with the **post-restoration 2025 images**, rather than on the surrounding varnished appearance visible in the earlier photograph.

8. Historical Context: The Gonzaga/Titian Caesars and “Domitian by Another Hand”

8.1 The Gonzaga Caesar series

Archival sources regarding the **Gonzaga series of the twelve Caesars** state that:

- **Eleven** portraits were painted by **Titian**.
- The twelfth, **Domitian**, was by “**another hand**.”

This indicates that from the outset there existed a **separate Domitian portrait**, not by Titian, which formed part of the ensemble.

8.2 Transfer to England and Stuart/Commonwealth history

In **1628**, art agent **Nicholas Lanier** arranged the purchase of much of the Gonzaga collection for **King Charles I of England**. The Caesar portraits entered the royal collections and were recorded in inventories, including those of **Abraham van der Doort**.

Subsequent research (including Martin Kemp’s) shows that:

- The series suffered **damage** (for example, from mercury spillage), and **Van Dyck** was paid for restorations.
- During the **Commonwealth sales (1651-1653)**, the royal collections were inventoried and dispersed.
- The relevant inventories (Contractors, Tylour, Stone) confirm the presence and valuation of “Titian’s Emperors”, but **do not securely demonstrate that all twelve original works remained together or left England as a closed set**.
- At least one emperor was later described as a “**pastiche**”, and Domitian was already recognised as non-Titian.

This complex history matches the idea that the **Domitian portrait “by another hand”** was an anomaly within the series and thus particularly vulnerable to **separate sale, removal or mishandling**.

9. Later Provenance

While some early links remain inferential, the **modern provenance** is clearer:

1. **17th-19th centuries:**
The painting likely circulated in British collections, undergoing the structural damage and older restorations now visible.
2. **1920s - Christie’s, London:**
The painting appears in a Christie’s auction in London, catalogued as a **Domitian by Titian**, under reference **348ET**. This confirms:
 - its presence in England, and
 - its continued association with the Caesar tradition.
3. **1938 - Sweden:**
The painting was **sold in Sweden**.
4. **1938-present:**
It has remained in the **same Swedish family**, providing a secure modern provenance.
5. **1994:**
The **“L da Vinci” inscription** was noticed and later examined scientifically.
6. **2020s:**
A comprehensive programme of conservation, imaging and scientific analysis was carried out, alongside archival research into the Gonzaga/Titian and Stuart contexts.

This chain excludes any recent fabrication and shows that the painting has been recognised as an important Domitian emperor portrait for at least a century.

10. Compositional Comparison with Leonardo’s “Man Wearing a Laurel Wreath”

A further line of evidence arises from **compositional comparison** between the Domitian head and Leonardo’s drawing commonly known as **Man Wearing a Laurel Wreath**.

10.1 Method

Digital overlays were prepared using:

- a high-resolution image of the **Domitian head**, and
- an image of Leonardo’s **Man Wearing a Laurel Wreath**.

The drawing was:

- **flipped horizontally** so that both faces look in the same direction, and
- **rotated** to match the tilt of the painted head.

This allows a geometrical rather than purely impressionistic comparison.

10.2 Observed similarities

The overlay highlights notable correspondences in:

- **Head orientation and torsion:**
Both figures combine a **profile head** with **shoulders turned three-quarters**, creating a dynamic twist characteristic of leonardian heroic portraiture.
- **Cranial proportions:**
Once scaled and rotated, the **forehead height**, **nose length**, and **back-of-head volume** align closely.
- **Jaw and neck:**
The **jaw angle**, the connection to the **neck**, and the sense of a **tense, muscular throat** are very similar.
- **Laurel wreath and hair masses:**
The **position and general outline** of the laurel wreath relative to forehead and occiput match in a way that suggests a shared underlying model.

These parallels are stronger than those one would expect from generic “Roman profile” conventions and indicate a **common compositional prototype** or strong influence.

10.3 Interpretation

This comparison does **not** prove that Leonardo painted the Domitian portrait. It does, however, support the idea that:

- The artist of Domitian worked with a **leonardian head type**, closely related to Leonardo’s own drawing.
- The compositional concept of the portrait head is rooted in **Leonardo’s design language**, not in an arbitrary or late invention.
- Coupled with the **leonardian-style colour construction** in passages like area H and the **old “L da Vinci” inscription**, the drawing comparison further justifies situating the painting within the **orbit of Leonardo’s artistic milieu**.

11. Synthesis and Attribution

11.1 Strongly supported points

1. **Renaissance age:**
 - Canvas radiocarbon-dated to late 15th century.
 - Original pigments consistent with 15th-early 16th-century practice.
2. **Originality:**
 - Multiple, well-documented pentimenti.
 - X-ray and IR evidence of compositional development.
 - Expert opinion (Anna Bronzoni Catellani) that the original paint layer shows **no sign of being a copy**.
3. **Technical sophistication:**
 - Optically constructed passages (notably area H: white matrix with discrete blue, green, yellow/orange, red, black and ----- particles).

- Method comparable to high-level Renaissance colour practice and broadly consonant with leonardian techniques of building subtle cool tones.
- 4. **Old “L da Vinci” inscription:**
 - Beneath aged varnish, undisturbed by modern restoration.
 - Pigments not modern.
 - Must be regarded as an **early attribution**, not a recent fake.
- 5. **Historical fit:**
 - Subject and character align with the historically attested **Domitian “by another hand”** in the Gonzaga/Titian Caesar series.
 - The painting’s damaged, restored condition is compatible with the Stuart/Commonwealth/Whitehall upheavals.
- 6. **Modern provenance:**
 - Christie’s 1920s as a **Domitian by Titian** (ref. 348ET).
 - Swedish sale in 1938; continuous family ownership thereafter.
- 7. **Leonardian compositional links:**
 - Strong geometrical parallels with Leonardo’s **Man Wearing a Laurel Wreath** drawing.
 - Head type, cranial construction and laurel wreath placement echo leonardian models.

11.2 Open questions

- No document yet directly connects this specific canvas to Gonzaga or Stuart inventories by inventory number.
- The inscription cannot yet be classed as a **proven autograph** of Leonardo.
- Complete step-by-step provenance from Mantua to Stuart England to Christie’s is still partly reconstructed rather than fully documented.

11.3 Working attribution

Taking the evidence as a whole, the most cautious and academically sound position is:

- The Domitian painting is an **original Renaissance work**, not a later copy.
- It was painted on a **late-15th-century linen canvas** using a **Renaissance pigment palette**.
- It exhibits **pentimenti and compositional development**, confirming a creative process.
- Its colour handling, particularly in the armour’s grey-blue passages, is **optically sophisticated** and technically compatible with **leonardian painting practices**.
- It fits the historical profile of the **Domitian “by another hand”** known from sources on the Gonzaga/Titian Caesar series.
- It carries an **old “L da Vinci” inscription** that must be weighed as an early attribution.

Accordingly, the painting should be regarded as:

A genuine and significant Renaissance work, very probably identical with the Domitian “by another hand” recorded in connection with the Gonzaga/Titian Caesars, and executed within the broader technical and stylistic orbit of Leonardo da Vinci’s milieu. While direct authorship by Leonardo himself has not yet been conclusively

demonstrated, the cumulative evidence justifies serious consideration of a close connection to his circle or workshop tradition.