

Case ref. Number: 0221-06/2023
Case assigned by: Roi S.
Mode of receipt: Online request / website form
To, Mr. [HIDDEN]
Address: Not-disclosed

1 Description of the Documents:

The content of this report is made by **Aithenticate.art** based on the documents described below.

1. RGB Photo of resolution 2655×1902 showing the questioned painting, from now on referred as **Q1**, provided by the customer. Refer to Figure 1 for the image of the painting **Q1**.
2. RGB png scans of the paintings labeled “*Admitted Authentic*”, including 214 verified authentic paintings from Picasso made during the period 1931-1933.
3. RGB png scans of the paintings labeled “*Admitted Forgeries*”, including 140 paintings made from forgers, followers of Picasso and also forgeries made by AI.



(a) Painting labeled as **Q1**.



(b) Signature on **Q1**.

Figure 1: The subject of this study, a painting labeled as **Q1** (a), signed as “Picasso”, and the extracted signature (b).

2 Assignment

1. To prove that the area of inscription of the painting **Q1** is **free of alterations**, by using digital inspection techniques.
2. To validate the resolution and pixel ranges on the **areas of inscription** of the painting **Q1**, *Admitted Authentic* and *Admitted Forgeries* as **identical** by our Artificial Intelligence (AI) and other digital comparison techniques.

- To find out whether the A.I. model determine that the Questioned painting **Q1** and the *Admitted Authentic* paintings have been made by the same person.

2.1 Declaration of Standards

For this work, we are working subject of one international standard:

- ANSI/ASB Standard 35: Standard for the Examination of Documents for Alterations** to ensure that there is no alteration of the document by physical, chemical, electronic, or mechanical means, or a combination thereof.

3 A.I. Authentication results

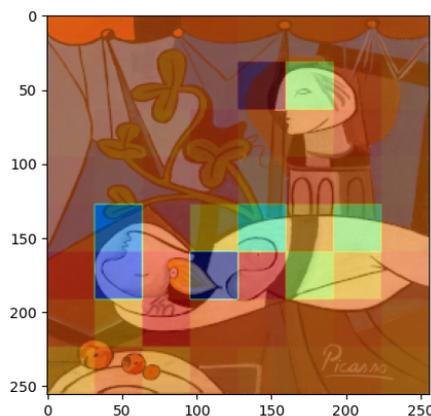
We run our A.I. based mathematical models applied to the digitized images of the paintings. This model learns from images of verified authentic paintings and skilled forgeries made by humans and Generative A.I., and is tested on separate different samples regarded as control.

- RGB png scans of the paintings labeled “*Admitted Authentic*”, including 214 verified authentic paintings from Picasso made during the period 1931-1933.
- RGB png scans of the paintings labeled “*Admitted Forgeries*”, including 140 paintings made from forgers, followers of Picasso and also forgeries made by AI.

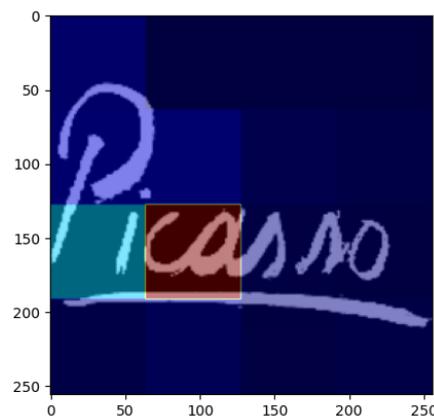
The output of the model is a classification accuracy computed based on these control samples, and also the verdict for **Q1**. For this experiment we obtained a classification accuracy of 97% for the control set, the classification ROC curve and a heatmap. The heatmap and ROC are shown on Figure 2.



Our A.I. model correctly classified 97% of the control samples of paintings in the experiment run. The verdict of the Artificial Intelligence model for **Q1**:
The A.I. classifies the painting Q1 as NON AUTHENTIC with a classification accuracy of 97%. The signature is also classified as NON AUTHENTIC, with a classification accuracy of 100%



(a) Painting labeled as **Q1**.



(b) Signature on **Q1**

Figure 2: On the left, the heatmap for **Q1**, showing in red the regions which contributed the most to classify **Q1** as **non-authentic** by the AI. On the right, the heatmap for the extracted signature.



(a) **Heatmap on the painting:** In red, the regions of the painting that are detected by the A.I. model as the most different in style with respect to the verified authentic paintings from Picasso. These regions are distributed all over the Q1 painting.



(b) **Heatmap on the signature:** Regarding the signature authentication, the A.I. highlights the region with the fluent thread connections between c and a. Indeed, it is very rare to find authentic Picasso signatures featuring a fluent thread connection between these letters, and also a close shaped a.

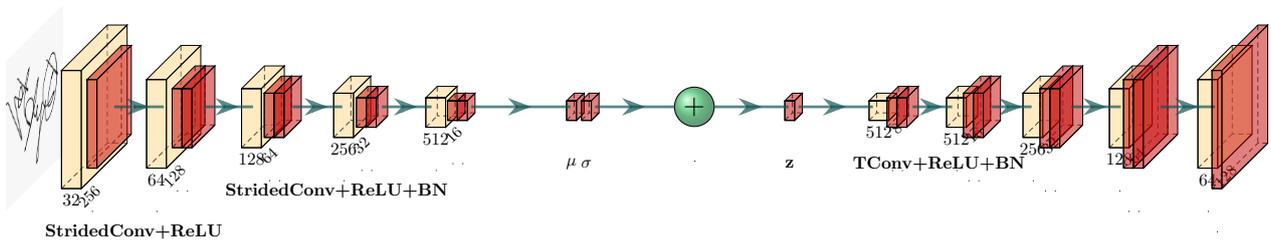
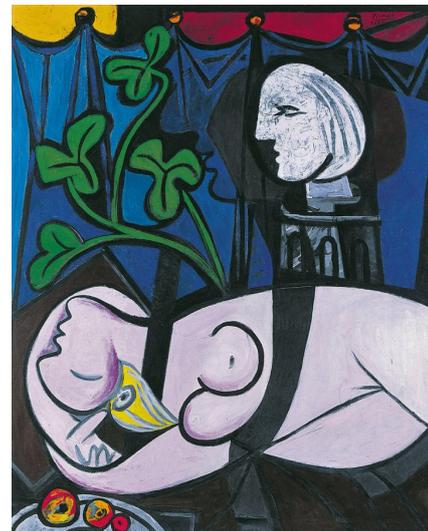


Figure 3: A diagram of the architecture for our A.I. model for Authentication of paintings.

4 Description of the artwork



(a) Painting labeled as **Q1**.



(b) *Nude, Green Leaves and Bust*, Picasso, 1932.

Figure 4: (a) reproduces the subject of this study, besides the most similar verified artwork from Picasso, (b).

Figure 4 (b) shows "Desnudo, hojas verdes y busto" or "Nude, Green Leaves and Bust". It is a notable painting by the influential Spanish artist Pablo Picasso, painted during his surrealist period. It was created in a single day on March 8, 1932.

This large-scale oil painting measures over five feet by four feet. It features Picasso's mistress, Marie-Thérèse Walter, portrayed as a reclining nude figure draped over the majority of the canvas, rendered in a mix of soft lilac and creamy white tones that contrast starkly against the darker colors of the surroundings. Her closed eyes and tranquil face suggest a dreamlike or introspective state.

Directly above her is a bust – a sculpted head rendered in Picasso's distinctive, fractured style that overlooks the scene. The bust, sharing the colors and stylistic elements of Marie-Thérèse, may also represent her.

The "green leaves" element of the painting comes from a large philodendron plant that occupies the right-hand side of the canvas. The plant is depicted in a rich, dark green and its voluminous leaves provide a lively contrast to the flatness and tranquility of the nude figure. It stretches out, casting dramatic, shadowy patterns over the rest of the scene.

The background is composed of varying shades of blue, adding depth and contrast to the artwork. Picasso also included a curtain on the top right corner, introducing a soft, draping element that counterbalances the rigid lines of the bust and the organic shapes of the leaves.

The entire scene is a showcase of Picasso's signature style - a fusion of his Cubist instincts with a surrealistic approach. It is a profound study of form, color, and composition. Aesthetically, it represents the tension and harmony between abstraction and representation, a theme that recurs throughout Picasso's work. The painting holds considerable historical significance, not just for its representation of Picasso's mistress, but also for its status as a testament to his innovative, genre-defining style.

4.1 Provenance of "Nude, Green Leaves and Bust".

The provenance of "Nude, Green Leaves and Bust" by Pablo Picasso follows a rather interesting path.

Created in 1932, the painting was owned by Picasso until it was sold to art dealer Paul Rosenberg. During World War II, it was shipped to the United States to keep it safe from the Nazis. It later ended up in the collection of Sidney and Frances Brody of Los Angeles in 1951, where it stayed until Sidney's death in 2009.

In 2010, "Nude, Green Leaves and Bust" was sold at a Christie's auction for a record-breaking price of \$106.5 million, making it the most expensive piece of artwork sold at auction at that time.

The identity of the buyer was initially kept anonymous, but it was later revealed to be billionaire hedge fund manager and art collector Steven A. Cohen. As of my last update, the painting remained part of Cohen's private collection.

However, given the nature of art sales and the fact that this information is current only as of 2021, I would recommend verifying the most recent ownership information from a reliable source.

4.2 References to other works from Picasso

Pablo Picasso was an extremely prolific artist who produced a vast body of work. His paintings of Marie-Thérèse Walter from the early 1930s are some of his most renowned, showing a shift toward more sensuous and dreamlike imagery. Here are a few examples of similar artworks from the same era:

1. **"Le Repos"** (1932): Features Marie-Thérèse Walter in repose, with a similar dreamlike, serene quality to "Nude, Green Leaves and Bust". The depiction of the reclining female figure is also a common theme.
2. **"Nude Woman in a Black Armchair"** (1932): Another intimate portrayal of Marie-Thérèse reclining, it shares the exploration of form, color, and the female figure that is seen in "Nude,



(a) "Nude in a Black Armchair", 1932.



(b) "Nude Woman in a Red Armchair", 1932.



(c) "Le Repos". 1932.



(d) "La Lecture". 1932.



(e) "Le rêve", 1932.

Figure 5: Other works from Picasso with similar motifs and artistic elements as **Q1**.

Green Leaves and Bust".

3. "Nude Woman in a Red Armchair" (1932): This painting features a sensual depiction of Marie-Thérèse Walter in repose in a red armchair. It shares with "Nude, Green Leaves and Bust" the dreamlike, serene quality, the exploration of form and color, and the depiction of the reclining female figure.
4. "Le Rêve" (1932): Depicts a dreaming Marie-Thérèse with simplified, sensual features. It shares the theme of tranquility and dreamlike quality, although the figure is seated rather than reclining.
5. "La Lecture" (1932): Depicts Marie-Thérèse engrossed in a book. The sense of peace and introspection is similar to "Nude, Green Leaves and Bust", but the subject is engaged in an activity rather than in repose.
6. "The Mirror" (1932): Portrays Marie-Thérèse in front of a mirror, capturing her from an alternative viewpoint. It shares Picasso's use of form and color, but differs in composition and subject interaction.
7. "Girl Before a Mirror" (1932): Shows a woman in front of a mirror, presenting a duality

between appearance and reflection. While thematically different, it shares Picasso's exploration of form and color.

8. **"Woman with a Book"** (1932): Features a fractured and reassembled bust of a woman holding a book. This painting is more aligned with Picasso's Cubist works and less directly comparable to the sensual, dreamlike quality of "Nude, Green Leaves and Bust".
9. **"Sleeping Woman by the Sea"** (1932): Depicts a sleeping woman by the sea, with soft curves and pastel colors. Although serene and dreamlike, it is less focused on the nude figure and more on the integration of the figure within the landscape.
10. **"Two Girls Reading"** (1934): Depicts two girls engrossed in their reading. This painting strays from the sensual depictions of Marie-Thérèse and is less directly comparable to "Nude, Green Leaves and Bust".

These artworks, like "Nude, Green Leaves and Bust," reflect Picasso's exploration of form, color, and symbolic content during this period, all influenced by his relationship with Marie-Thérèse Walter.

4.3 Stylistic and Graphological Divergences

In the quest to authenticate the subject artwork, our thorough investigation points convincingly to it being a forgery. The conclusion stems from an in-depth juxtaposition of both the stylistic features of the painting and the characteristics of the signature it bears, against the well-documented traits of Picasso's authenticated oeuvre.

Commencing with the examination of the artwork, the painting at first glance seems to mimic Picasso's "Nude, Green Leaves and Bust." However, a closer inspection reveals pronounced divergences in the execution. The imitation showcases a noticeably simplified usage of color compared to Picasso's layered, vibrant, and dynamic palette. The uniformity of the hues in the imitation lacks the subtle tonal gradations that lend Picasso's work its unique vitality and depth.

Additionally, the original artwork's abstracted and organic forms are replaced in the forgery with an exaggerated roundness. This presents an overly literal interpretation of Picasso's revolutionary approach to the human figure. Such lack of subtlety disrupts the delicate balance between abstraction and representation, a balance intrinsic to Picasso's style.

The artwork also falls short in capturing the sense of depth inherent in Picasso's original piece. In place of the intricate interplay of spatial relationships in "Nude, Green Leaves and Bust," the imitation exhibits a relative flatness. This reveals a failure to replicate Picasso's masterful manipulation of space, rooted in his groundbreaking Cubist perspective.

4.3.1 A Closer Look at the Signature

Shifting focus to the signature on the painting provides additional evidence bolstering the forgery assessment. Picasso's signature is known for its clear, confident letters and a characteristic underscore. The signature on this painting exhibits distinct discrepancies, signaling a flawed replication.

Notably, Picasso's signatures typically feature an open 'a', marked by a clear separation between the upward stroke and the circular part of the letter. In contrast, the signature on the examined painting presents a closed 'a', an unusual trait.

Moreover, the connection between the 'c' and 'a' in 'Picasso', usually not fluid in the artist's genuine signatures, is suspiciously smooth in this instance.

The underscore, another identifying element of Picasso's signature, further deviates from the norm. Instead of Picasso's slightly linear or gently 's' shaped underscore, reflective of his self-assuredness, the underscore in this signature exhibits a convex shape, straying from Picasso's signature style.

These graphological divergences, in conjunction with the stylistic inconsistencies, point compellingly towards the conclusion that the subject artwork is not an authentic Picasso.

5 Conclusion

As we conclude our analysis, it is important to emphasize that while our findings indicate that the subject artwork is not an authentic Picasso, it remains a visually appealing work. Its vibrant colors and inspired imitation of Picasso's innovative form are sure to make it a compelling addition to any space. The painting, in its own right, has aesthetic value and can serve admirably as a decorative piece.

Our comprehensive investigation, however, leads us to a definitive conclusion: the artwork, while beautiful, cannot be authenticated as a genuine Picasso. Our evidence stems from both stylistic and graphological discrepancies that veer away significantly from Picasso's characteristic oeuvre.

The painting's stylistic attributes differ from those of Picasso's "Nude, Green Leaves and Bust" in critical ways. Its colors are more uniform, it shows a tendency towards excessive roundness in its depiction of the human form, and it lacks the sense of depth that is a defining characteristic of Picasso's original work. These factors contribute to a notable flatness in the painting that contrasts with Picasso's typical complex and dynamic style.

Furthermore, our AI model for art authentication, which has shown a high accuracy of 97% in classifying control samples of paintings in the experiment run, strongly supports this conclusion. This model's high level of accuracy increases our confidence in the assertion that the subject artwork is not an authentic Picasso.

In terms of the signature, key deviations were found when compared to Picasso's standard signature characteristics. Notable anomalies include an unusual fluid connection between the 'c' and 'a', a closed 'a' shape, and a convex underscore, all of which contrast with Picasso's typical signature traits.

In summary, while the artwork under scrutiny holds aesthetic appeal and can serve as a decorative piece, our rigorous analysis reveals it lacks the stylistic and graphological hallmarks consistent with an authentic Picasso. These findings underscore the importance and effectiveness of comprehensive authentication methods, including our AI model, in attributing artwork to revered artists such as Pablo Picasso.

6 Disclaimer / Legal note

The present report by Aithenticate.art is the result of the digital analysis and description of the images of the signatures submitted by the customer, using mathematical models. This analysis has been done with Diligence and Good Faith, but Aithenticate.art does not provide any warranty with the correctness of the sentences in this report with respect to the authenticity, or guarantees any error-free operation of Image Analysis Software, including the Artificial Intelligence (AI) model used. To the extent permitted by law, all warranty and liability of Aithenticate.art is hereby excluded, including, but not limited to, liability for financial damage in connection with the use of the present report document and the confidence in it, any decisions taken, purchases, sales, insurance, security, display or other dispositions relying upon the present report, damage or loss profits due to incorrect statements in the report. For further information, please refer to our [Terms and Conditions](#).