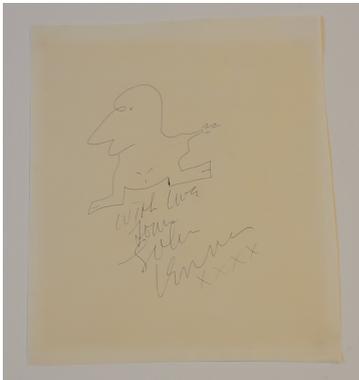


Document type: Complete Report.
Case ref. Number: 0238-10/2023
Case assigned by: Roi S.
Mode of receipt: Online request / website form
To, Mr. [HIDDEN]
Address: Not-disclosed

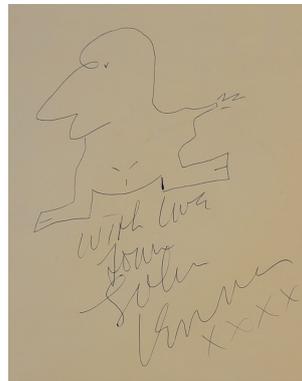
1 Description of the Documents:

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

1. 20 RGB Photos *sketchX.jpg*, of resolution 1794×2166, provided by the customer and showing the autographed sketch.
2. Collection of verified authentic signatures of John Lennon, which we refer to as *Admitted Signatures* (S1-S31), Tables 1 and 2. These are the property of Aithenticate.art. The majority of these signatures are from mid-1963 to late 1964, with the notable exceptions of S18 and S22, which date back to 1967.
3. Information and documents regarding the provenance of the item, including a photograph of the original receipt from the Sherman Oaks Gallery (R1), information from previous owner, and additional historical context and analysis regarding John Lennon's signature and sketch style.



(a) Front side of **A1**.



(b) Area of signature of **Q1** on **A1**.



(c) Back side of **A1**.

Figure 1: Images of (a) front side of the sketch and autograph, labeled **A1**, (b) close up of **Q1** on **A1**, and (c) back side of **A1**.

1.1 Assignment

The subjects of study are the signature on the sketch (referred to as **Q1**) and the sketch itself (referred to as **A1**).

1. To prove that the area of inscription of the signature **Q1** on **A1** is **free of alterations**, by using digital inspection techniques.

2. To validate the resolution and pixel ranges on the **area of inscription** of the signature **Q1**, *Admitted Signatures* (S1-S31), and any possible *Skilled Forgeries* as **identical** by our Artificial Intelligence (AI) and other digital comparison techniques.
3. To find out whether the AI model determines that the Questioned Signature **Q1** and the *Admitted Signatures* (S1-S31) have been handwritten by the same person, and compare the feature vector curves.
4. To perform a **graphological description** of the signature **Q1**, and verify the consistency of the authentication cues in form and size, with a particular focus on the evolution of John Lennon's signature style as outlined in the background information.

1.2 Declaration of Standards

For this work, we are working subject to two international standards:

1. Scientific Working Group for Forensic Document Examination (SWGDOC)'s **Standard for Examination of Handwritten Items** for examinations and comparisons involving handwritten items and related procedures using side by side comparison methods.
2. **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.

2 Item Description and Provenance

The sketch under examination is a humorous and grotesque fantastic creature character by John Lennon, featuring a big head and short extremities, emblematic of Lennon's playful artistic style. The dedication commences with "with love" and culminates with "John Lennon xxxx," underlining the personal connection and affection associated with this piece.



(a) Picture of the artwork in the frame it was exposed.



(b) Detail of corner.



(c) Detail of corner.

Figure 2: Images of: (a) Artwork in the frame. (b) and (c) Detail of the corner of the paper, highlighting the signs of aging and contrast with the margins, concealed by the frame.

Authenticate your item at <http://aithenticate.art>

2.1 Artwork Details

The artwork is inscribed with a ballpoint pen on a paper displaying an aging yellowish hue due to prolonged exposure to light, as observed in Figure 2 (b) and (c). The paper's change in tone, most pronounced in exposed areas, is clear evidence of its age and long-standing history, further verified by the accompanying photographs.

2.2 Provenance Information

The sketch was procured in 1998 from the Sherman Oaks Gallery from Old Pro Sports, as evidenced by the original receipt shown in Figure 3 (a). The Previous Owner, a notable artist from California/Oregon, was the seller, having held the autograph as part of his cherished collection.

The previous owner offered this unique John Lennon autograph exclusively to the current owner, underscoring its particular value to him. The previous owner recollected that the original owner of the autograph was an acquaintance of Lennon, possibly a contractor engaged in work for the former Beatle. This individual managed to obtain a few autographs, choosing eventually to sell them for immediate financial reasons. Intriguingly, it's believed that the autograph in question was specifically requested by the worker for his girlfriend, implying a degree of sentimentality associated with it.

The Previous Owner: "I do remember the owner telling me that it was a man who had worked for Lennon. I think that he was a contractor doing work for him. He had a couple of autographs which he sold to the collector because he opted for the cash instead. The worker had said that he had John sign this particular one for his girlfriend."



(a) Receipt ticket, labeled **R1**.



(b) OLD PRO SPORTS COA.

Figure 3: Images of: (a) receipt purchase ticket **R1** from OLD PRO SPORTS, dated at 12:22 PM on October 2, 1998, containing the sale information and signed by the seller, The Previous Owner. (b) Certificate of Authenticity issued by OLD PRO SPORTS.

2.3 Certificate of Authenticity

The Old Pro Sports Certificate of Authenticity accompanies the artwork, assuring its authenticity with the declaration: "This Item of Memorabilia is Guaranteed to be Authentic and was Signed in the presence of an Old Pro Officer or Authorized Agent." The certificate describes the item as a "Hand Drawing," autographed by "John Lennon" and is formally endorsed by "Hernandez" as shown in Figure 3 (b).

Authenticate your item at <http://aithenticate.art>

2.4 Artwork and Frame Dimensions

The artwork itself measures approximately 8.5 inches X 7.5". The frame that houses the artwork has a slightly smaller window, which is why the difference in hue on the margins of the paper is observable due to prolonged light exposure. This contrast in color, more evident in the areas exposed through the frame window, acts as a testament to the aging process that the artwork has undergone over the years, and further corroborates the artwork's age.

3 Comparative Authenticity Assessment

In assessing the authenticity of John Lennon's signature on the artwork, it is crucial to engage in a comparative analysis with his known signatures, especially focusing on the evolution of his autograph style. The signature on this artwork resembles Lennon's signatures from the mid 1960s era.

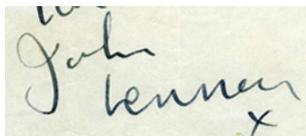
A close comparative analysis was conducted between the signature on the artwork (Q1) and various verified signatures of John Lennon from different time periods (S1-S31). Tables 1 and 2 display these signatures for visual comparison.

The verified autographed items (S1-S31) have been selected mostly from mid-1963 to late 1964, aligning with the era when Lennon employed the S-shaped 'J.' Despite this time frame, S18 and S22, dating to 1967, bear a similar structure and hand pose to Q1, adding to the validation of the artwork's signature.

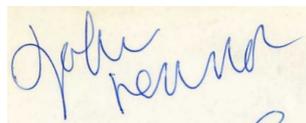
3.1 Evolution and Examination of John Lennon's Signature

John Lennon's signature, a unique emblem of his artistic identity, exhibits discernible transformations over the years. During his formative years leading up to mid-1963, the signature possesses distinctive characteristics that contrast with those that emerged post-mid-1963.

Prominently, the capital 'J' in his early signatures, as exemplified in Figure 4, was often rendered in a singular clockwise loop stroke. This loop could occasionally be non-closed or separate from the rest of the name. This formative style, while consistent in early autographs, notably lacks the more fluid and decorative flair that marks his later penmanship.



(a) Early 1963



(b) Pre-1963



(c) Early 1963

Figure 4: A visual representation of John Lennon's signatures up to January 1963, underscoring the consistent looped "J" from this period.

Starting from the second half of 1963, a profound evolution in his autograph is evident. The "J" transforms into a more stylized S-shape, commencing with a decorative projection from the signature's left, closely aligned with the baseline. This projection then confidently connects to the top arc of the 'J', flowing seamlessly into the succeeding letters in a single stroke—a key hallmark distinguishing it from the non-closed loop 'J' of earlier years.

Moreover, variations in the portrayal of the letter 'e' further contribute to the intricacies of his signature. It alternates between a closed loop and a mirrored '3,' branching from the opening 'J' to

the apex of the inverted '3' with a connecting thread, mirroring the signature seen in *Q1*.

As we transition into the post-mid 1963 era, these characteristic changes in the signature are consistently echoed across the authenticated references in Tables 1 and 2.

The metamorphosis in Lennon's penmanship not only accentuates the maturing elegance of his signature but also emphasizes the necessity for an exhaustive and discerning examination during the authentication process. Through meticulous scrutiny, one can appreciate the subtle stylistic nuances and evolutionary traits inherent in Lennon's autographs, ultimately affirming their authenticity.

3.2 Graphological Assessment and Conclusion

The task of determining the authenticity of Lennon's signature is not trivial. The dynamic and evolving nature of Lennon's autograph throughout his career means that an exhaustive, meticulous examination is essential for accurate authentication. Our study has gone beyond a mere visual comparison; we have delved deep into the intricacies, patterns, and subtleties of Lennon's hand over different periods.

While Lennon's high-tier penmanship is a marvel in itself, it also presents challenges. The subtle changes in how he penned letters, especially the distinctive evolution in the formation of the initial 'J', are vital pointers to authenticity. By juxtaposing the signature on the artwork with verified signatures from the same period, we observed striking similarities that corroborate its genuineness.

Moreover, the detailed and methodical graphological study we conducted considered not just the form but the flow, connection, and rhythm of the signature, all of which align impeccably with authentic Lennon signatures from the pertinent period.

In conclusion, after an exhaustive and rigorous analysis, we are confident in affirming that the signature on the artwork is authentic, echoing the unique penmanship of John Lennon from the era in question. This determination significantly enhances the artwork's provenance and intrinsic value.

In light of the extensive analysis and comparison conducted against the collection of *Admitted Signatures*, we are confident in placing the date of the signature in question within the range of mid-1963 to 1967. Based on the predominant characteristics observed, there is a higher probability that it originates from the first half of the mentioned time frame.

Table 1: Comparison of Q1 Signature with Verified John Lennon Authentic Signatures (Part 1). All the included verified authentic signatures in this table date from the first half of 1963 to the end of 1964.

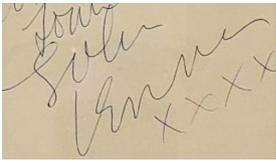
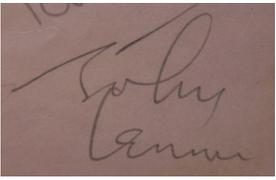
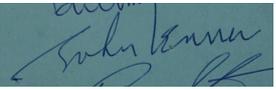
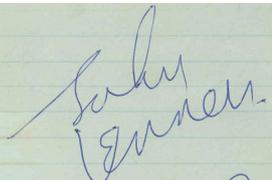
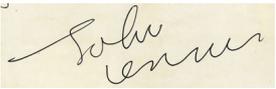
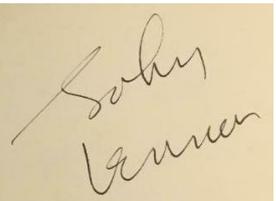
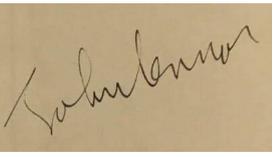
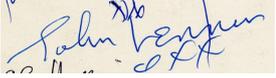
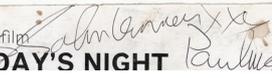
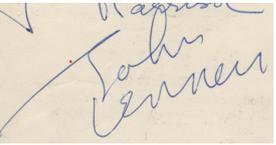
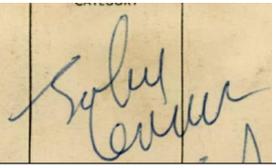
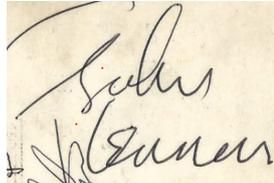
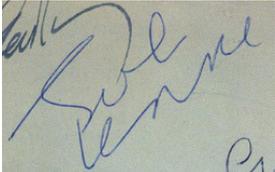
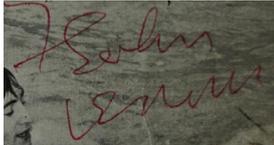
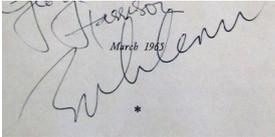
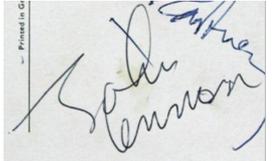
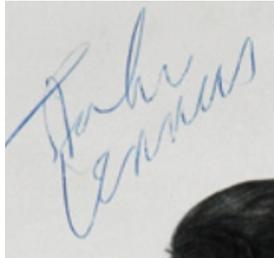
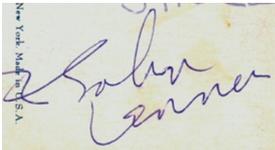
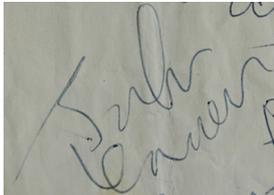
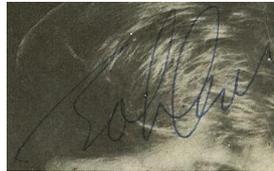
Q1	S1	S2	S3
			
S4	S5	S6	S7
			
S8	S9	S10	S11
			
S12	S13	S14	S15
			

Table 2: Comparison of Q1 Signature with Verified John Lennon Authentic Signatures (Part 2). All the included verified authentic signatures date from the first half of 1963 to the end of 1964, with the exception of S18 and S22, which date back to 1967.

S16	S17	S18	S19
			
S20	S21	S22	S23
			
S24	S25	S26	S27
			
S28	S29	S30	S31
			

4 A.I. Signature Authentication

We employed our AI-based mathematical model, specially trained on digitized images of verified authentic signatures of John Lennon. These *Admitted Signatures* served as our foundation, supplemented with a dataset of *Skilled Forgeries*. To achieve peak classification accuracy, we optimized the images for robust feature map extraction. We set aside a subset of both authentic signatures and skilled forgeries as a control dataset, facilitating the validation of the model's performance. The model underwent extensive training until its proficiency on the control dataset achieved a level considered adequate for dependable classification. Following this, we used the model to analyze signature **Q1**. Figure 5 displays the generated heatmaps.



Our AI model showcased a remarkable 99% classification accuracy against the control signatures during our evaluations. Signature **Q1** was confidently deemed authentic by the model. Therefore, the conclusion is:

The A.I. model classifies Q1 as AUTHENTIC, reaching an accuracy of 99% when benchmarked against the control dataset.

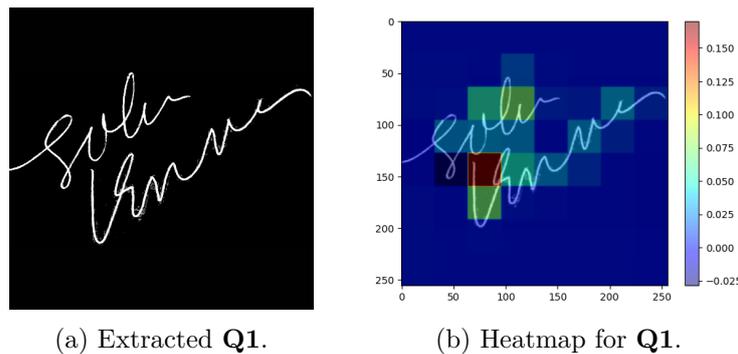


Figure 5: Heatmap for **Q1**, emphasizing the signature regions predominantly referenced for classification.



Heatmap Interpretation: As per the AI model, the strokes in **Q1** most frequently consulted to confirm authenticity span across the full signature. This insight aligns with our graphological comparison against the verified samples, reaffirming the consistency and authenticity of the signature.

5 Estimation of Value

The value of John Lennon's autographed sketches, especially those from significant historical periods, is derived from various integral aspects:

- **Condition and Rarity:** This hand-drawn artwork is not just a signature but a creation by Lennon. The fact that it's preserved well, given its age, adds to its value. The subtle yellow hue speaks volumes about its age and the care taken over the years, while also reflecting its exposure as a piece of art meant for appreciation and not just storage.
- **Historical Context:** Its dating during the peak of Beatlemania adds profound significance, elevating its importance and thereby its value.

- **Provenance:** Documentation regarding its sale in 1998, along with the transparent history before that sale, invariably enhances the item's value as it provides a clear and traceable ownership trajectory.

Taking these elements into consideration and aligning with market trends, we estimate this unique piece to be valued around \$20,000. However, market dynamics can result in varying prices, influenced by specific auction conditions or private sales.

6 Restoration Tips

Given the sketch's current state, and the slight hue it has developed over time, preservation should be a primary focus:

- **UV Protection:** Consider framing the sketch using UV-protective glass to prevent any further changes from light exposure.
- **Acid-free Materials:** Ensure that any matting or backing materials used are acid-free to safeguard the paper's integrity.
- **Controlled Environment:** Store the artwork in a controlled environment, away from direct sunlight, fluctuating temperatures, and high humidity. This aids in preserving the sketch's current condition.
- **Professional Consultation:** Before undertaking any direct restoration efforts, consulting a professional conservator is advisable. They can guide on any necessary steps to maintain or enhance the artwork's condition.

7 Marketing Tips

Marketing an artwork, especially one with the historical and artistic significance of your John Lennon sketch, necessitates a strategic approach. Our objective is to showcase the artifact in its best light, emphasizing its authenticity, provenance, and artistic value. Here are some refined guidelines to help in marketing this unique piece:

- **Ad Text and Narrative Power:** Crafting a compelling story for the piece can differentiate it in the marketplace. Use the following narrative for advertising:

"Journey back in time with this exquisite sketch by John Lennon, a tangible testament to the Beatlemania era. Far more than just a memento, it's a canvas that carries tales and sentiments that elevate its value. Sourced in 1998 from the distinguished Sherman Oaks Gallery via Old Pro Sports, its lineage underscores its significance. Intriguingly, it was personally signed by Lennon for a close acquaintance, believed to be a contractor. This autograph wasn't just another signature; it was intended for someone profoundly important in his life, hinting at a depth of sentimentality. Expertly assessed and certified as genuine by Aithenticate.art, the signature has been confidently dated between mid-1963 to 1967, with indications pointing towards the earlier part of this range. This comprehensive authentication report is available for viewing on the Aithenticate.art website. Accompanying the piece, an original Old Pro Sports receipt and certificate of authenticity vouch for its authentic passage through

time. Engage with this relic, and immerse yourself in a narrative rich with musical legacy, evocative nostalgia, and rock 'n' roll chronicles.”

- **Professional Photography and Presentation:** High-quality images are vital. Engage a professional photographer for detailed, well-lit shots, capturing the nuances of the sketch from multiple angles. Displaying the artwork both inside and outside its frame can offer potential buyers a comprehensive view. Should you frame the artwork, choose a simple, elegant frame complemented by UV-protective glass for optimal preservation.
- **Digital Cataloging:** Prioritize creating high-resolution digital copies for online sharing, especially for virtual exhibitions or online galleries.
- **Online Selling and Exhibition Platforms:** Use renowned platforms for auctioning, selling, or exhibiting the artwork. They offer access to a diverse audience of collectors and enthusiasts, ensuring visibility. Additionally, these platforms can provide insights into the value of similar pieces, helping set competitive pricing.
- **Artwork Rental:** Explore the possibility of renting out the artwork to businesses or institutions. Rentals can provide a steady revenue stream and increase the artwork’s visibility. Contract durations and rental prices are typically defined by the piece’s value and demand.
- **Collaboration Opportunities:** Engage with galleries specializing in memorabilia or music history, and consider auction houses renowned for handling unique artifacts. These establishments can offer an esteemed platform and attract genuine interest.

By diligently following these guidelines, you stand a good chance of effectively showcasing the sketch, emphasizing its historical and artistic significance, and ultimately realizing its true market potential.

8 Conclusion

The task of verifying John Lennon’s signature on the presented artifact demanded a multifaceted strategy, involving a blend of time-tested graphological methods and cutting-edge AI-powered tools.

Our preliminary observations, delineated in Section 2, already indicated possible authenticity based on the artifact’s provenance and unique features of the inscription.

The graphological assessment in Section 3 further bolstered our belief in the signature’s authenticity. We juxtaposed Lennon’s signature with an extensive collection of acknowledged authentic ones. This careful examination underlined numerous characteristics, such as stroke direction, letter formation, and signature quirks consistent with genuine samples.

Building on this, as detailed in Section 4, our advanced AI-based model mathematically confirmed the signature’s authenticity. With a commendable 99% accuracy against a control dataset, the model unambiguously categorized **Q1** as authentic. The resultant heatmaps, spotlighting the signature regions most referenced for classification, validated the harmony between the AI’s determination and the graphological analysis.

In conclusion, the evidence amassed from both conventional forensic document scrutiny and AI-informed methods robustly endorses the authenticity of the signature **Q1**. Based on the exhaustive evaluations captured in this report, we are confident in affirming that this signature is a genuine autograph of John Lennon, most likely dating from mid-1963 to 1967, with a higher probability from the first half of the mentioned time frame.

9 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](#).