

Paul Gauguin in Brittany

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ABSTRACT

Ever since the dawn of the 20th Century there has been a universal consensus that Alphonse Mucha launched the sensation that became known as Art Nouveau. This event was associated with the appearance of his *Gismonda* poster promoting the Sarah Bernhardt play of that name in Paris in 1894. At an estate sale in 1954 a small collage bearing a likeness of Mucha's *Gismonda* was offered. It had been fabricated by gluing slivers cut from sixty postage stamps to a 20cm ceramic tile. Digital computer image enhancement was applied to the collage design, initials on a walking stick from the same estate collection, and the Mucha poster. These geometrical analyses revealed that the collage is more detailed than the Mucha "original". This led to our hypothesis that the famous poster was a hasty photographic plagiarism of the intricate ceramic-tile collage. Image analyses of the initials on the companion walking stick revealed conformity with the famous enigmatic "P GO" monogram of Paul Gauguin. We conclude that Gauguin rather than Mucha created the *Gismonda* composition. Historical evidence suggests that, while Gauguin was in Brittany recovering from injuries sustained in a fistfight, Annah la Javanese stole his possessions and took them to Paris where her next lover, Mucha, copied the collage and presented it as his original poster design.

Keywords: Art Nouveau, image processing, Paris, poster art, Alphonse Mucha, Gismonda, collage, Paul Gauguin

1. INTRODUCTION

A small collage of paper fragments pasted onto the glazed face of a ceramic tile appeared in 1954 at an auction of objects from a San Marino, California estate. The collage design portrays the actress, Sarah Bernhardt, in the title role of *Gismonda* in Sardo's 1894 Paris theater production. A careful inspection under magnification reveals that the figure was created by gluing snippets from at least sixty French postage stamps onto the of a common household ceramic tile. It appears that the stamps have all been cancelled, however the cancellation marks are undecipherable due to the manner in which the very tiny fragments are dispersed throughout the entire composition. No paint or ink is used to outline the lady. The borders consist of dark lines cut from postage stamps.

In 1967 the tile with the attached collage was shown to the French art dealer Oscar Meyer^[1]. He immediately exclaimed: "My God, that's by Paul Gauguin!" He identified the Gauguin self-portrait as a jester appearing behind the banner on the plinth and the "GP" initials at the lower right-hand corner. (He had seen receipts signed by Gauguin in exactly that manner.) In addition another "GP" is formed by Bernhardt's right hand and sleeve, and various "PG" initials appear in the drapery of the gown. These discoveries planted the first seeds of what was to grow into a theory that Gauguin, not Alfons Mucha, was the authentic father of the Art Nouveau movement.

According to Mucha's son, the events leading to the overnight public infatuation with the school of Art Nouveau began during the Christmas holidays of 1894^[2]. The manager of the Theatre de la Renaissance called Mucha's printing shop asking if anyone there could design a poster for *Gismonda* as his artist was ill. It was stipulated that the poster had to be composed, executed, and published within five days as Madame Bernhardt insisted that it appear on December 31. In spite of this crushing deadline and tremendous pressure the posters were drying by December 31 and distributed throughout Paris on January 1. It was an immediate success and Parisians applauded the launching of the school of the "new art". Soon "Style Mucha" became an international movement known as "Art Nouveau" and the unknown Czech artist, Alfons Mucha, became his native country's national hero.

The accidental discovery of the postage-stamp collage raises the specter (from historical, stylistic, and technical perspectives) of an act of plagiarism. These aspects of the issue are explored and analyzed in the forthcoming sections of this paper.

2. LATE 19TH CENTURY PARISEAN ART

French art and culture rebounded in a wave of vigor and optimism following the trauma and agony of the Franco-Prussian War, the capitulation of the Imperial Army in 1870, and the ensuing political and civil upheavals. French Impressionism became the worldwide focus of a new renaissance in arts and architecture. Artists, dealers, collectors, and bohemians flocked to Paris in order to celebrate the sense of a new and explosive vitality. The Eiffel Tower symbolized a revolutionary fusion of art and industry. Names such as Degas, Manet, Monet, Vuillard, Van Gogh, Gauguin, and Renoir became the most recognizable touchstones of Western Art.

Henri de Toulouse-Lautrec became famous as a prolific practitioner of the “Poster Art” branch of Impression. Figure 1 reproduces images of the styles typical of the poster art before the appearance of the “New Art” (Style Mucha/Art Nouveau) of Alfons Mucha and his portrayals of Sarah Bernhardt and her theater appearances (Figure 2).



Fig. 1. Typical Parisian posters from the era preceding the appearance of Mucha’s *Gismonda* (1894) that heralded the Art Nouveau movement. On the left is a liquor advertisement (1893) by Henri Guydo. Henri de Toulouse-Lautrec produced the poster on the right to promote a performance (1892) by the cabaret singer, Aristide Bruant.

3. HISTORICAL MILIEU

In May 1894 Paul Gauguin moved from Paris to Pont-Aven in Brittany. While on a stroll with friends and fellow artists, his bizarre attire provoked a shouting match with three passing sailors. In a letter to a friend Gauguin related the climax of the encounter: “They started throwing stones at Concarneau, when I was walking with Annah. I knocked down with two punches a pilot who attacked me. I took them all on, and kept the upper hand, until my foot caught in a hole and in falling I broke my leg.” He was confined to bed for two months and his inability to paint led to long hours, days, and weeks of boredom. To another friend he replied: “Your letter surprised me in utter idleness: in front of me a heap of unanswered letters growing higher each day.” We speculate that this “heap” constitutes the material of the stamp collage. Although Gauguin is best known for his easel paintings, he worked in various media including wood and metal. At the time of his stay in Brittany he was also collaborating in designs for stained glass that contributed to the art of Tiffany. Thus, creating a collage would be in keeping with his broad interests in diverse media^[3].



Fig. 2. Sarah Bernhardt (left), whose performance in Sardou's *Gismonda* inspired the emergence of Art Nouveau. One of Mucha's most famous designs (*La Plume*) illustrating the pinnacle of his "Style Mucha" (right).

During Gauguin's convalescence it is known that he was largely limited to reading his favorite monthly publication, "Le Figaro Illustre", which featured a color picture of Sarah Bernhardt as she appeared between acts of the play *Izely*. She was greatly admired by Gauguin, as, in addition to her acting, she was an accomplished painter and sculptress. It is doubtful that he saw her except in photographs as in the Le Figaro illustration. (However, there are historical hints that Gauguin may have traveled to London a few months earlier, specifically, to witness a Bernhardt stage performance there.) It is plausible that Gauguin was inspired by the Bernhardt photograph, his anticipation of her appearance in the Sardou (his idol) *Gismonda* production, and the widely admired pose of *Liberty Enlightening* (Statue of Liberty, also depicted in Le Figaro) by Bartholdi. The *Gismonda* collage presents itself as a synthesis of these three elements. Gauguin's confinement, inability to paint, mountain of postage stamps, infatuation with the subject, and access to a ceramic tile (the renovation of his rooming house: Figure 3) make him a likely candidate composer of the collage. Nevertheless, this raises the speculative question as to how this artifact (if created by Gauguin) might have fallen into the hands of Alfons Mucha in Paris. Gauguin's letters to friends suggest the following scenario.

With each passing day of Gauguin's confinement and recuperation his model and mistress, Annah la Javanese, became progressively more restless and less agreeable. She was probably bored with Gauguin and his country life. She longed to return to the excitement of Paris and did so in September with any effects of value that she was able to loot from Gauguin's possessions. (Perhaps, the original artwork composed upon the tile was among these items.) Upon Annah's return to Paris she began modeling for Mucha, became his mistress, and took up residence in his studio (Figure 4).

The Bernhardt poster emergency fell upon Mucha's print shop several weeks after Annah joined him in Paris. It is plausible that in the urgency of those final hours of December Mucha came upon a desperate solution to his dilemma. He would have placed the *Gismonda* tile in photographic enlarger, traced the poster-sized image on paper, and use the copy to prepare the lithographic press. There would have been no time or sensible rationale for seeking Gauguin's permission for use of his pilfered property.

This hypothetical scenario establishes a circumstantial case for the provenance of the *Gismonda* tile and its role in the genesis of Art Nouveau. However, the superficial plausibility of this explanation does not constitute a defensible proof. Toward this end, digital computer image processing (IP) has been applied to the study of the *Gismonda* image of the tile collage and the Mucha poster. We also employ IP to analyze Gauguin's signature and compare it to scratches on a cane from the same estate lot of the tile.



Fig. 3. A Pont-Aven street (left) showing the irregular pavement where Paul Gauguin may have fallen and broken his leg during a brawl with three seamen. The rooming house (right) in Pont-Aven where Paul Gauguin lived with Annah la Javanese and recuperated from his broken leg in 1894.



Fig. 4. Photographic self-portrait of Alfons Mucha in his Paris apartment/studio in early 1894 (left). Mucha photograph of some friends in his studio in 1894 (right). His future model and lover, Annah la Javanese, is in the rear at the center. Gauguin is in front.

4. GEOMETRICAL COMPARISON OF THE TILE AND POSTER

The famous 1894 *Gismonda* poster by Mucha appears to scale juxtaposed with the postage-stamp collage in Figure 5 (black and white reproductions in both instances). In determining the probable origin of the *Gismonda* poster design it is relevant to compare the precise geometries and details of the collage with those of the poster. In principle the flicker technique, photogrammetry, and 3-D video imaging are both convenient and informative in such comparative studies. However, for hardcopy transmission to scholars (viz., art historians) and convenient interpretation we found that a color-coded overlay provides the most revealing display for our purposes. This may be accomplished by means of a photographic double exposure in which one image is in one color and the other is in another. Thus, when the two images match, the colors combine (e.g., red and green may combine to produce yellow). In regions where image contours are not superimposed the degree of color displacement reveals geometrical image differences. With the advent of digital computer image processing this type of operation is much more readily and precisely performed with a computer than by means of photographic reproduction.

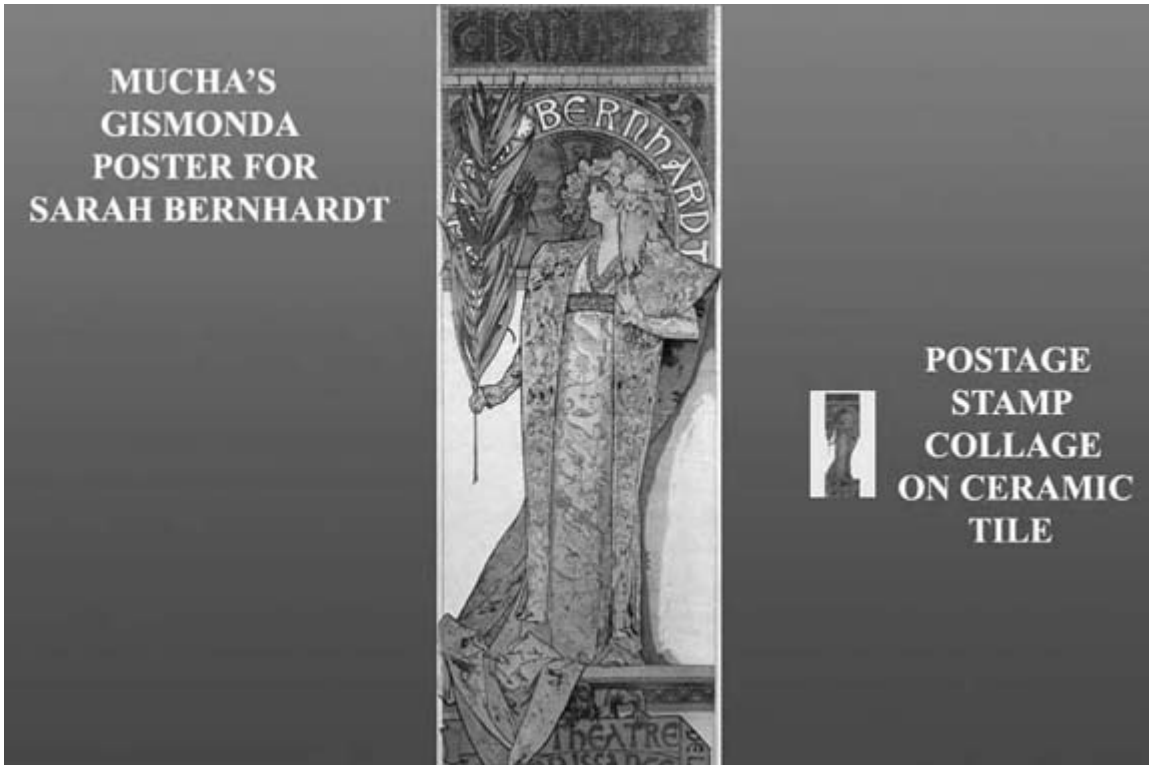


Fig. 5. A black and white reproduction of the sensational 1894 *Gismonda* poster by Alfons Mucha (center). The postage stamp collage is shown (black and white) to scale on the right.

Our first step in implementing such a bicolor *Gismonda* superposition was the digitization of high-quality photographic reproductions of the poster and collage images. A high-pass image-processing (edge detection) algorithm was applied to both images in order to enhance outlines and details for comparison. The (5x5) kernel in the transformation was:

$$\begin{array}{ccccc} -1 & -1 & -1 & -1 & -1 \\ -1 & -1 & -1 & -1 & -1 \\ -1 & -1 & 25 & -1 & -1 \\ -1 & -1 & -1 & -1 & -1 \\ -1 & -1 & -1 & -1 & -1 \end{array}$$

which signifies that the intensity value for the pixel in question is multiplied by 25 and the 24 surrounding values are multiplied by -1. The central pixel value is replaced by the normalized sum of all 25 numbers.

As the original two photographs from which Figure 5 was produced were of different magnifications, it was necessary to scale the digital image files to identical sizes. This was accomplished by adjusting the respective scales so that face-neck lengths were equal numbers of pixels. The horizontal scale was checked by means of the separation of the hands.

The initial geometrical comparison was accomplished next by digitally subtracting the enhanced Mucha design from the enhanced collage design. The result is shown in Figure 6 (left) with the original red/green pseudo color coding replaced by a gray scale for this publication. In Figure 6 the Mucha poster design edges are displayed in gray. The collage design edges appear as white lines. A careful inspection of the Figure 6 (left) overlay reveals that there is an almost perfect match between the outlines of the two compositions for the top halves. Specifically, by following the profiles of each palm leaf or gown detail it is seen that they are represented by light-dark line pairs that follow identical trajectories in most instances.

On the other hand, when the entire superposition is considered (rather than just the top half), an entirely different picture emerges. The entire lower half exhibits a major vertical displacement. This suggests that a central horizontal strip of the Mucha poster is missing (with respect to the collage composition). In order to illustrate this hypothesis that the Mucha design is incomplete, this image was sliced at the center and the upper and lower portions were separated (in the computer's digital image file). Figure 6 (right) displays the consequences of such an operation. The top and bottom halves of the Mucha poster image conform perfectly to respective portions of the collage image. This shows that the poster is missing a band of detail at the center constituting about 5% of its length. This conclusively establishes that the collage cannot be a copy of the poster. On the other hand this opens the door to the possibility that the poster could be an enlarged copy of the collage. Thus, it is technically possible that the collage may be the template from which the poster design was derived.

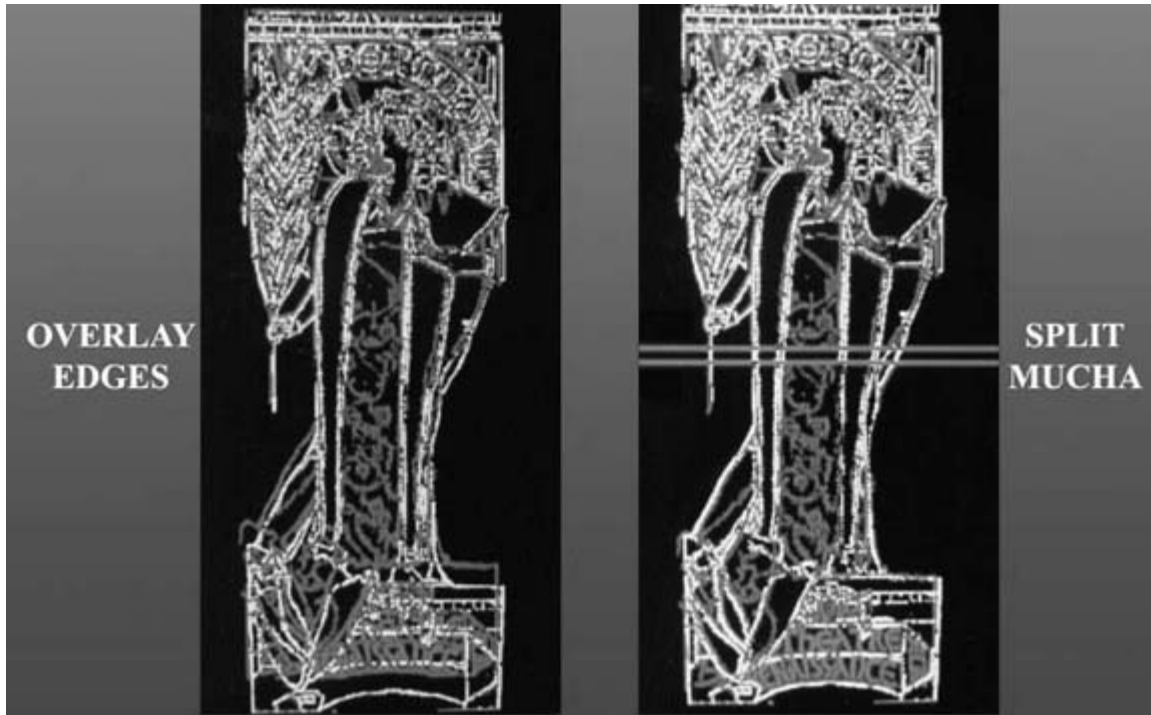


Fig. 6. Overlays of the edge-enhanced outlines of the *Gismonda* figures from the Mucha poster (gray) and the postage-stamp collage (white). The overlay on the left reveals that the poster figure is shorter in proportion than the collage. On the right the poster image has been split and the lower half has been moved downward in order to match the collage at both the top and the bottom.

In producing the Figure 6 (right) overlay the poster image was arbitrarily sliced at the center as a cursory inspection indicated this level as the origin of the discontinuity. However, we were able to determine the precise position of the dislocation by considering design details of the gown. The front panel of the *Gismonda* gown has a repeating sea creature/foilage design with four cycles. Figure 7 (left) reproduces one floral element in one cycle of the complete branch with leaves. This appears in a complete form in all four cycles on the collage and three of the four cycles on the Mucha poster. However, on the poster the fourth of the cycles is presented in an abridged and unsymmetrical form (Figure 7, right). This feature appears at the second cycle from the top of the gown panel. This is at the level of the proper right hand of the female figure. This element is complete on the collage.

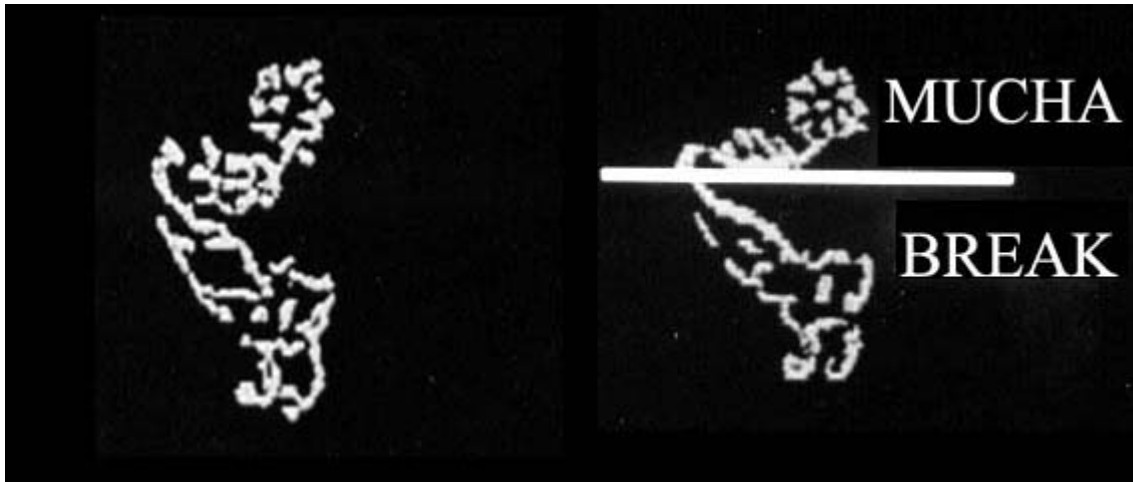


Fig. 7. Typical design detail from the front of the *Gismonda* gown (left). The same gown design detail at the location of the apparent break at the middle of the *Gismonda* poster (right) identifying the elements that have been removed.

5. WALKING STICK PROVENANCE

We developed another piece of evidence to consider in addition to the expert attribution of the collage tile to the hand of Paul Gauguin (Section 1). There was an antique hand-carved walking stick in the estate sale with the tile collage. Clearly, Gauguin would have required such assistance once his leg had healed enough for him to leave his bed. The handle end of this hand-carved cane exhibits faint traces of deliberate scratches. A black and white copy of a color photograph of this cane handle is reproduced at the top of Figure 8. We employed computer image enhancement to each of the scratches in an effort to decipher them. We employed FFT and Hi-Pass spatial filters as well as pseudo-color and gain-bias transformations. The results of these numerical operations are shown at the center of Figure 8. Gauguin's writing style was notably idiosyncratic so it seemed implausible to suppose that our performing cross correlations with diverse alphabet styles would prove fruitful. Consequently, we relied on a subjective visual comparison of the enhanced scratches with a characteristic Gauguin signature (Figure 8, bottom). We concluded that the walking stick scratches are probable representations of Gauguin's signature.

It is known that Gauguin worked with several different media in his art. It follows that it is plausible to surmise that he may have carved the walking stick himself. In late 1894 when Annah left Gauguin and stole his property she probably realized that his art was beginning to attain some marketable value (as did one of his landladies who refused to relinquish some of his paintings). It seems that Annah pilfered both the cane and the *Gismonda* collage from Gauguin's possessions and took them to Mucha's studio when she moved in with him. Then Mucha had a perfect opportunity to copy Gauguin's collage composition under the emergency situation of having only days to create a commercial poster for Bernhard. The association of the collage with the walking stick supports this scenario.

6. CONCLUSIONS

In conclusion, it emerges from this computer-aided comparison of the two designs that the geometries are virtually identical except for a horizontal band that is omitted at the center of the poster. As the two *Gismonda* artworks are so different in size, the only 19th Century technology capable of producing a scaled copy of such high fidelity would be an optical photographic enlarger such as those available to Mucha in his employer's print shop. If one supposes that the tile collage was a photographically guided copy of the Mucha poster, there is no sensible explanation for adding a strip in the middle. Conversely, the lithographic process is such as to quite easily lose a strip in going from an enlarged image of the tile to the poster. (It is customary to print large posters with two lithographic plates and detail at the joint between the two plates is lost.) A third possibility is that both pieces are copies of some common ancestor. However, on the one hand there is no evidence for such a work. On the other this would involve two independent optical copy procedures with the attendant doubling or the degradation in spatial fidelity. This is belied by the observed precision of the spatial match.

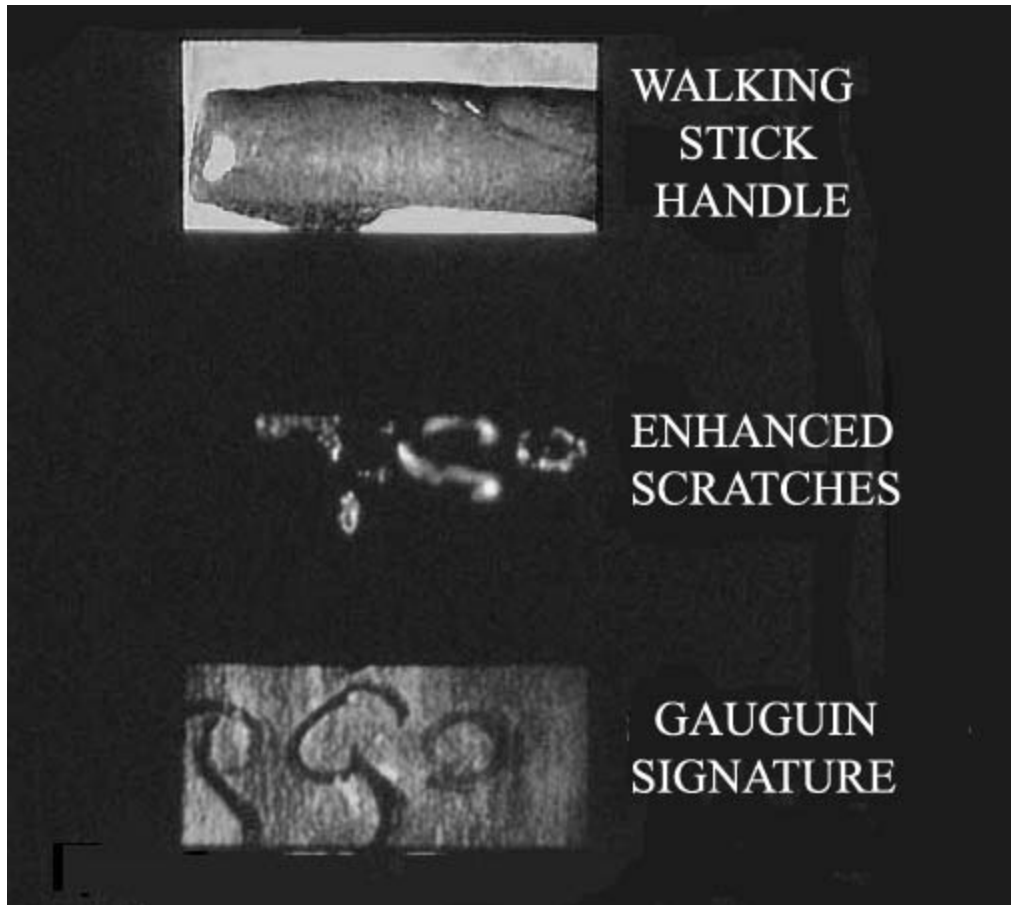


Fig. 8. A photograph of the handle of a wooden walking stick (top) from the same estate sale as the postage-stamp collage. Computer-enhanced (FFT, edge enhancement, gain-bias adjustment) scratches on the handle of the walking stick (center). Typical Paul Gauguin signature from a painting (bottom).

Further, the mechanics of collage making are such that it would be vastly more difficult to produce from an optically projected image than would be a drawing. Lastly, evidence that the collage is by Gauguin is compelling as the autographs on both the collage and the associated walking stick conform to those known to be of the artist.

The inescapable conclusion to be drawn from this study must be that Gauguin is the originator of the design of the *Gismonda* poster that triggered the rise of the Art Nouveau movement. What remains to be resolved is whether Gauguin (in distant Tahiti) knew of Mucha's use of the design, whether he gave his friend permission to use it, or whether it was simply an act of plagiarism.

7. ACKNOWLEDGEMENT

Mr. Charles Tyler of Brentwood, California proposed and developed the Art Nouveau genesis theory summarized above. He also paid the mainframe computer (CRAY) time charges associated with the digital image manipulations of this investigation.

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