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Title: **Discriminating Palettes: The Painting Materials of Clementine Hunter and Her Imitator**

Abstract

The paintings of Clementine Hunter, an illiterate and self-taught folk artist from Natchitoches Parish, Louisiana, once sold for pennies but now command prices in the tens of thousands of dollars. In recent years, a number of works attributed to her have been suspected to be forgeries. In the course of the criminal investigation, McCrone Associates was contracted to examine a number of works purchased directly from her, and thus of known authenticity, and compare their material constituents with works suspected to be imitations. The comparative analyses proved useful to the investigators, as both groups had both distinctive palettes and a number of visual characteristics as well. This presentation will summarize McCrone's findings and show the efficacy of the comparative approach, which can be enormously effective in generating data of evidentiary value.

The following items were examined:

- Five paintings, purchased directly from Hunter in the 1970s by one collector, were examined, photographed front and back, with close up photographs made with a stereomicroscope of signatures and other details. Samples were taken of a range of colors representative of her palette and analyzed in our laboratory.
- Five paintings, purchased directly from Hunter in the 1970s by another collector, were examined, photographed front and back, with close up photographs made with a stereomicroscope of signatures and other details. In this group was not sampled and received only visual analysis.
- Five paintings, purchased from a third party and whose authenticity was questioned, were also examined, photographed front and back, with close up photographs made with a stereomicroscope of signatures and other details. Samples were taken of a range of colors representative of the artist's palette and analyzed in our laboratory.

The analytical methods performed on the paint samples included polarized light microscopy (PLM), energy dispersive x-ray spectrometry in the scanning electron microscope (EDS in the SEM), Fourier transform infrared spectroscopy (FTIR) and Raman spectroscopy. The results were summarized in tabular form, and a chart was created showing the distribution of painting materials between the five known Hunters and the five questioned paintings. Both artists had distinct palettes, but they differed significantly in a number of materials.

Comparison of the photographic images, especially the photomicrographs, also provided important evidence. Not only did the materials themselves differ, the manner in which they were applied in the

paintings also differed. Major differences were found in economy of brush strokes to produce, for example, a subject's eye; in the use of underdrawings; and in the manner in which the background paint was applied. Photomicrography also documented the presence of dirt in the questioned paintings; this is a commonly used method to "age" a painting. Notably, there were major differences in the manner in which the signatures were applied to the paintings as well: in the authentic paintings, they were painted, whereas, in the questioned paintings, they were written.

In summary, significant differences were found between the known authentic paintings and those of questioned authenticity. This paper will describe the analytical methods used, the data generated during the analyses, and the conclusions the analyses permitted to be drawn.