Revealed: A Lost Illustration by N. C. Wyeth

by Jennifer Mass and Christina Bisulca

Newell Convers (N. C.) Wyeth (1882–1945), the father of iconic American artist Andrew Wyeth, did his groundbreaking work during the golden age of illustration in the early twentieth century. Wyeth is perhaps best known for his illustrations that appeared in the novels of Robert Lewis Stevenson and James Fenimore Cooper and in popular magazines like the *Saturday Evening Post*, *Scribner's,* and *McClure's*.

Shortly after completing work for the 1919 reprint of Cooper's *The Last of the Mohicans,* Wyeth began to move away from illustration to focus on landscape, portraits, and still life paintings. He would occasionally reuse his old canvases, turning them upside down and painting over them, not to save money, but to be inspired by the colors and abstract shapes of the inverted composition while he painted.[1] As a result, many of these illustrations, buried beneath later compositions, are known today only in their black and white reproductions in magazines and books.

One of these original illustrations, thought to have been lost since the 1920s, has been found through research by Winterthur Museum's Scientific Research and Analysis Laboratory, the University of Delaware's Art Conservation Department, and CHESS, the Cornell High Energy Synchrotron Source. The project began when Brandywine River Museum curator Christine Podmaniczky noted an *Everybody's Magazine* label on the reverse of a study by Wyeth for a family portrait mural (Fig. 1). Podmaniczky knew the mural study—which N. C. had planned to transfer to the living room wall of his Chadds Ford, Pennsylvania, home—had never been published in a magazine. She approached Winterthur/UD paintings conservation professor Joyce Hill Stoner, who, with her graduate students, discovered areas of unusual impasto (raised

ABOVE:
Fig. 1: N. C. Wyeth (1882–1945), *Study for Family Portrait*, ca. 1927. Oil on canvas, 23 x 40 inches. Brandywine River Museum, Chadds Ford, Pa., 96.1.47.

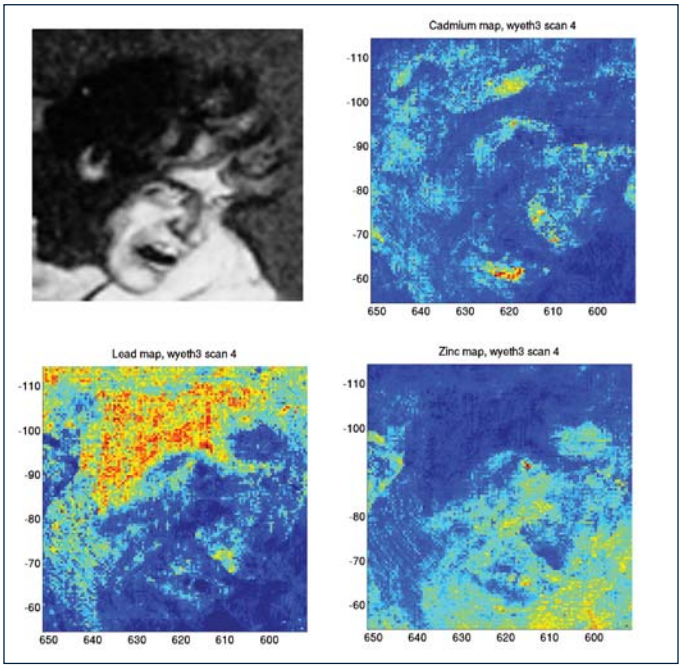
FACING PAGE, UPPER LEFT:
Fig. 2: N. C. Wyeth (1882–1945), *Everybody's Magazine* illustration for "The Mildest Mannered Man" by Ben Ames Williams, January 1919 issue.

FACING PAGE, INSET:
Fig. 3: X-ray fluorescence intensity maps of cadmium, zinc, and lead in the region of Slag Harshmeyer's face. The red and yellow data points are used to mark regions of high concentration of these three elements. Note the high concentration of cadmium in the area of his open mouth. This suggests the interior is colored red, since cadmium is used to prepare cadmium red, a red pigment that was developed in the first decade of the twentieth century.

FACING PAGE, UPPER RIGHT:
Fig. 4: *Everybody's Magazine* illustration, colored using Adobe Photoshop© software version 7.0. Colors based on 3D and intensity mapping x-ray fluorescence technologies, conventional microanalysis methods, and art historical research.

paint ridges) on the surface of the painting inconsistent with the image. X-radiographs proved that there was indeed another painting beneath the family portrait. Podmaniczky was able to identify the underpainting as one of three illustrations created for the short story "The Mildest Mannered Man" by Ben Ames Williams, published in *Everybody's Magazine* in 1919 (Fig. 2). This original composition, not seen since the 1920s, is a dramatic portrayal of a fight between the story's villain, Slag Harshmeyer, and the protagonist, Eben Lewis, over the fate of Eben's family's iron foundry and the affections of the story's heroine, Hulda Lingstrom.

The illustration was reproduced in the magazine in black and white in 1919, and no color reproductions or photographs of the original painting exist. When discovered, it was not therefore known if the illustration had been rendered in color or *en grisaille* (it was common for turn-of-the-twentieth century illustrators to render their illustrations in black and white if they thought they might be reproduced in this manner).



Today's x-ray methods make it possible to nondestructively identify the pigments present in buried paintings (i.e., without taking any samples). We analyzed Wyeth's family mural using two of these new technologies, confocal (or 3D) x-ray fluorescence and x-ray fluorescence intensity mapping, in collaboration with Cornell physicist Arthur Woll and art conservators Noelle Ocon and Matt Cushman. The 3D technique relies on using a very tightly focused x-ray beam to generate x-rays from the pigments in individual paint layers. The energies given off by the pigments are characteristic for each element, and this information can be used to identify the pigments present and hence the color of the buried paint layer (for example, the presence of mercury suggests vermilion, a red mercury sulfide pigment). This technique allows the pigments present within the buried painting to be isolated and studied independently from the surface painting. The x-ray fluorescence intensity mapping technique scans an x-ray beam across the painting and collects the energies of the x-rays given off by the painting, allowing a map of the composition of the buried paint layer to be created. These analyses, in combination with art historical research and conventional scientific techniques available in Winterthur's laboratory, were used to generate a color reproduction of the illustration (Figs. 3 and 4). It was determined that the flames emerging from the iron smelting forge on the right-hand side of the painting were painted white with highlights in cadmium yellow. Hulda's dress, described in the text as "cornflower blue," was rendered in cobalt blue.

Historically the reuse of painted canvases is not uncommon (it is estimated by paintings conservators that approximately one in ten canvases has another painting buried beneath its surface). This project demonstrates how a greater understanding of previously inaccessible artworks can be achieved through the cross-disciplinary collaboration of curators, art conservators, and scientists.

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1. Joyce Hill Stoner, "An Evolving Technique: N. C. Wyeth's Materials and Methods." In *N. C. Wyeth: Catalogue Raisonné of Paintings*, Vol. 1, ed., Christine B. Podmaniczky, (London: Scala Publishers Limited, 2008), 75–90.