



Smithsonian American Art Museum

Mercurial Pigments: Chymistry, Color Theory, and Studio Practice in American Painting, 1720–1880

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This book project will explore American painting practices and the material dimension of the craft from the colonial period to the Gilded Age. I shall research color theories and the history of artists' pigments, oils, solvents, glazing, and binding media, the better to explain how painters constructed cultural and sociopolitical meanings through the manipulation of colors and tonal values. The book will especially focus upon the painting medium in relation to the scientific/metaphysical paradigm of "chymistry." As indicated by its archaic spelling, the history of "chymistry" interweaves modernizing developments in chemistry with the persisting hermetic traditions of alchemy.

Anglo-American trans-generational pursuit of the Venetian "secret" of color and Titian's oil glazing technique coincided with theories of optics descended from the alchemical, color, and light experiments of Robert Boyle and Sir Isaac Newton. George Berkeley's *Siris* (1744) and other theological, natural philosophy texts embraced chymical interpretations of light while resisting mathematical, mechanistic theories. Newton's confused distinction between prismatic light and pigment mixtures and his alchemical hypothesis that all gross matter could be transmuted into light particles allowed painters and color theorists alike to think of pigments as mercurial, protean agents mediating between heaven and earth. Painters imagined sublimely transforming earthly pigment compounds into virtually immaterial atoms of colored light held in suspension by webs of fluid brushstrokes and thin, transparent glazes. Thanks to Newton's optical investigations, English and Anglo-American school painters, led by Benjamin West, seemed poised to recover Titian's legendary lost secret for color glazing.

Washington Allston gained international renown as the "American Titian." Allston, Thomas Cole, Samuel F.B. Morse, William Sidney Mount, and other American painters cited and copied the color treatises of the English pigment manufacturer George Field and Scottish theorist David Ramsay Hay. Field and Hay, inspired by Masonic, hermetic symbolism, opposed the continuing quantification of chemistry and optics in favor of metaphysical, triadic arrangements of primary, secondary, and tertiary colors between the value-laden, racially tinged polarities of white/black, light/dark. American antebellum painters' enthusiasm for geology and mineral collections complemented their keen interest in appropriating pigments native to the disappearing American wilderness. Transmuting native pigments into luminous American paintings implicitly expressed the westward advance of arts and learning earlier prophesied by George Berkeley.

However, after the mid-nineteenth century, the chymistry paradigm inspiring earlier generations of American painters was fracturing. Science, religion, and art moved in different directions. William Page and George Inness both pursued Titian's Venetian secret. Yet Inness relegated chemistry to a lower, materialist order of truth associated with contemporary, photographic-style realist painting. Divorced from its alchemical origins and the poetic, spiritual truth of Venetian color, prosaic, modern chemistry had become married to mathematical, analytical science.