

Europe in the 18<sup>th</sup> & 19<sup>th</sup> Centuries suffered an artistic setback. Ralph Mayer in “The Artist’s Handbook.” states “During the eighteenth century, and more completely during the nineteenth, the knowledge and intelligent study of the methods and materials of painting fell into a sort of dark age.”<sup>i</sup> “It was a period of keen interest in the methods of painting of previous centuries, when it was hoped that a close study of ancient texts on the techniques and materials of the Old Masters would contribute to a revival of ancient achievements”.

This ‘sort of dark age’ was most apparent to the British Royal Commission when they initiated research to uncover what was the cause of this down turn in art. They employed Mrs. Mary Merrifield; her books ‘The Art of Fresco Painting as Practiced by the Old Italian and Spanish Masters’ (1846) and the “Original Treatises” (1849) were a direct outcome of this activity.”<sup>ii</sup> It followed that Sir Charles Eastlake, a formidable authority in antiquities and fine arts was commissioned to uncover the same mystery of the failed arts, producing “Methods and Materials of Painting of the Great Schools & Masters” 1847, Vol. I &II, both pillars for art history research.

A century earlier Sir Joshua Reynolds(1723-1792), president of the Royal Academy (1768-1792) and the most important English painter of his day, noted in his diary his obsession in his desperate failed attempts to recover any portion of the lost and esteemed painting mediums of Rembrandt and Rubens. Quoted from the original MSS in the handwriting of Reynolds<sup>iii</sup>; describing his portraiture, with some entrees dated:

“Mr. Pelham, painted with lake and white and black and blue, varnished with gum mastic dissolved in oil with sal Saturni and rock alum. Yellow lake and Naples and black mixed with the varnish.

July 7<sup>th</sup>, 1766. “Lord Villers, given to Dr. Barnard. Painted with vernice fatta de cera and Venice Turp. Maschiato con gli colori macinati in olio. Carmine in vece di Lacca ( wax and Venice Turpentine, mixed into color with oil. Carmine in place of Lake.)

“The Speaker, the colori in olio mischiato con magilp, poi Verniciato .( color in oil mixed with meguilp, then varnished.)”

“Master Buck, finito con vernice. Senza olio o cera, carmine. (finished with varnish, mastic, without oil or wax, carmine.)”

“Duchess of Ancaster, prima magilp, seconda olio, terza olio.” (first sitting meguilp, second sitting oil, third oil.)”

“Lady Almeria Carpenter, Mrs Cholmondeley, con magilp, terza olio. (first two sittings with meguilp, third oil)”

poi cerata seza colori, (his own portrait, almost finished in wax, then finished with mastic varnish, then with colorless wax..)" The random mixture of these ingredients in these few entrees reveals the perplexing nature of this folk science in acquiring the admired Flemish Technique of the Old Masters. The failed darkened and cracked paintings of Reynolds paintings speak for themselves.

Before any definitive oil practices of the 'Old Masters' could be uncovered a new product emerged from the Industrial Age that would change the course of art. The invention of tube paint by John G. Rand went into production by Winsor-Newton in 1841 in England. This single event would redefine the direction of art; not only by changing not how artist's worked, the quality of painting, but ultimately what was art .

Tube paint made painting accessible to anyone. 'En plein air' painting became possible where artists were not bound to their studio, apprenticeships were exchanged for ateliers, academies or informal outings. The simplification of tube paints eliminated the technical understanding for paint binders and mediums for grinding powdered pigments taught by the Masters and in academies. The new tubes of paint needed only an occasional thinning with turpentine or blending with stand oil (a drying linseed oil). However, this marvel came at a great price. The resin, the primary ingredient in paint binders and varnishes of the past had to be eliminated because it would readily harden in the tube. Resin, the major ingredient in varnish, made paint adhere, shinny and transparent, so that without resin tube paint was flat. Ironically it was as if painting had reverted back to before the 'invention of oil painting' by Van Eyck in 1410. Before Van Eyck painting was done in tempera which was flat and varnished with resin (called pitch) and oil to make it shinny protecting the painting. For the old timers pitch or resin was used as a hardener and dryer which is a major concern today with tube paints because they are very slow dryers.

At first tube paints were ground with pigment and raw linseed oil which was not a problem if they were fresh tubes. But in a short time the pigment in the tube would separate from the oil squirting out leaving a harden mass of hardened pigment (such as occurs in natural peanut butter). Then boiled linseed oil and calcium carbonate were added to precipitate the oil with the pigment, yet hardening of the tubes still occurred. For longer shelf life poppy seed oil was added but that took forever to dry and necessitated a dryer. With these new problems of shelf life, precipitation, eventually lead to sterates and emulsifiers, which thinned the pigment adding lift to the tube paint. The same problems that had been for older artists grinding pigments with paint binders and mediums now applied to tube paints manufacturers and artists faced the problems of additives and emulsifiers and their effects on the canvas, not to mention that resin was never

flat with no shiny resinous quality. Shiny paintings had been the norm for five hundred years and with one technical innovation it vanished. Had this observation been overlooked? After all, this transparent quality is what is revered in Renaissance painting, the Dutch and Flemish guilds, the Umbrian Schools, Humanism, Mannerism, Chiaroscuro, and the Baroque and Rococo Schools, Pre Raphaelites not to mention the Hudson River School and Luminism.

Not only were tube paints technically different, but it caused a radical stylistic change in art by changing the manner in which painters applied their paint and what colors they used. The limitation of tube paint made for opaque painting, flat without transparencies especially transparent shadow. This forced these new painters to lift up their pallets to the characteristic high pitch of the Impressionists. The fact the Impressionists were said to be painters of light is a misnomer, because light effect painters painted shadow to create light and Impressionists could not paint shadow, but only stylized it with touches of black and violet. Notice the absence of umber in an Impressionist painting: it is non-existent, for the simple reason that brown could not be made transparent. This brought on a dual effect: first, the elimination of the umbers brought favor to this new style of bright colored paintings replacing the 'dark and dingy' brown paintings; secondly by removing the umber shadows, there is a loss of grounding to the earth approaching an artificial quality; and thus appropriately named 'Impressionism'. Rather than trying to replicate the past with its subtle transparencies, tube painters, because of its opaque nature, took the other extreme and created hard edge flat painting. It is the premise of this discussion that because tube paint was a compromised technique it led the way to flat painting evolving into the highly chromatic imagery of Impressionism, Post-Expressionism and Fauvism. Flat painting directed art away from naturalism. It abandoned realism for abstraction, hard edge, primary colors, all because of the artificiality that tube paints inspired. As artists got further away from painting natural light effects, painting became more interpretive, subjective and abstracted. Some painters like Seurat created his Divisionist Manifesto, the Cubist had their rules, even the Surrealists had manifestos. In the end Abstract Expressionism did away with conventional paint and any paint worked even house paint. It seems that now we are here to pick up the pieces and find the way again.

- i 'The Artist's Handbook of Materials and Techniques' Mayer, Ralph, 1947, pp2
- ii Introduction to the Dover Edition 'Original Treatises on the Arts of Painting'  
Merrifield, Mrs. Mary P. Dover, New York 1967 unabridged republication , John  
Murray, London 1849
- iii 'Methods & Materials of Painting of the great Schools & Masters' Eastlake, Sir  
Charles, Vol. I, Dover New York ,1960 original 1847 pp 539-46