

## HOW TUBE PAINT CHANGED ART HISTORY

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 also commissioned to uncover the same mystery of the failed arts, “Methods and Materials of Painting of the Great Schools & Masters” 1847, Vol. I &II. These manuscripts have become pillars of art history.

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 Windsor-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 stick, shinny, transparent and dry, so that without resin tube paint was flat and dried slowly. 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 the tubes were fresh. But left alone in a short time the pigment in the tube would separate from the oil squirting out leaving a harden mass of wasted 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 the new problems of shelf life, separation and drying, this eventually led to the addition of sterates and emulsifiers, which greatly thinned the intensity of the pigment. The same problems that had existed for older artists grinding pigments with paint binders and mediums now applied to tube paint manufacturers leaving the artists to deal with the problems of additives and emulsifiers and their effects on the canvas, not to mention that the benefits of resin was never resolved in tube paint. This is why painting in the latter half of the 19<sup>th</sup> century is predominately flat with no shinny resinous quality. Shiny paintings had been the norm for four hundred years and with this one technical innovation it vanished. Had this observation been overlooked? After all, this varnish quality is what was revered in Renaissance

painting, the Dutch and Flemish guilds, the Umbrian Schools, Humanism, Mannerism, Chiaroscuro, 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, where any paint worked even house paint. It seems that now we are here to pick

up the pieces and find the way again.

It is my contention that the materials are the first salvo for the artist in creating any art, where the materials establish limitations or freedom depending on the genius.

by Peter Arguimbau

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<sup>i</sup> ‘The Artist’s Handbook of Materials and Techniques’ Mayer, Ralph, 1947, pp2

<sup>ii</sup> 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