Stretched Canvas: A Recent Innovation in Painting

Although canvas is undoubtedly the most popular and preferred medium of painters today, the use of canvas for paintings was not widespread until the Renaissance, particularly in 16th century Venice. Until that time, oil painting had been executed primarily on wooden panels. But in the damp climate of the watery city of Venice, the wooden panels tended to deteriorate, necessitating a new medium which could tolerate the presence of moisture over time. The use of canvas that was properly prepared to prevent deterioration and stretched on a wooden frame was seen as a solution for oil paintings and dramatically changed the nature of paintings and their execution.

The word canvas is derived from the Latin word "cannabis" and has existed as a fabric since ancient times. Canvas can be composed of hemp, flax or cotton. The flax plant is the source of linen. The fibers of linen are round and give the fabric and irregular texture and therefore a very natural and random look that is highly prized by artists. The natural presence of linseed oil in the plant preserves the fibers and keeps them flexible. Canvases composed of hemp and of linen are virtually indistinguishable from each other with the naked eye but since linen was the more costly of the two due to the difficulty of processing it, hemp was quite popular among artists for whom cost mattered until the end of the 18th century.

In the early 19th century, cotton produced from the American East Coast began to dominate the canvas market and hemp production waned. Much less expensive than linen, cotton canvas has become the most popular support today for oil and acrylic paintings, particularly among students. The longevity of cotton is considered to be comparable to that of linen when it is sized properly. Although cotton is easier to stretch, it is considered too flexible for very large paintings. Also, the surface of cotton canvas is more regular and is considered less desirable by many artists than linen canvas.

Since the fibers of both cotton and linen canvas are susceptible to attack by the substances contained in oil paints, canvas must be prepared before it is used to increase the longevity of the artwork. "Priming" is the application of an absorbent coating or "ground" to the canvas that provides a surface to which the paint can adhere. Priming of the canvas is not necessary for acrylic painting but is often desired nevertheless to provide a surface to which paint is more easily applied.

To prime a canvas for oil paint, a sizing must first be applied to prevent decomposition. "Size" is a glue barrier that prevents the ground (applied later) and paint from coming into contact with the fabric. Rabbit skin glue sizing is most often used; it connects the fibers so they act as one unit and prevents the cracking that can occur when different areas of the painting react to the environment separately.

The traditional method of priming for oil painting consists of two or more coats of an oil primer, typically lead white paint, on top of the rabbit skin glue sizing. Each coat is allowed to dry and is lightly sanded before the next coat is applied. Canvas prepared in this way should not be used for acrylic paintings. Alternatively, acrylic gesso can be used for either oil or acrylic paintings. It consists of calcium carbonate in an acrylic polymer medium and a pigment and is used as both a sizing and a primer. Although acrylic gesso can be used with oil paint, some experts feel that this combination has not been proven to endure without degradation over time.

The increasing use of canvas in the last few centuries has had a significant impact on painting as an art form. The portability of a painting executed on canvas freed painters to work in the comfort of their studios or even out of doors instead of at the final destination of the work of art, as with mural painting. Large canvases were more easily transported and mounted than large wooden panels. In addition, the discontinuity caused by the need to paint around or over architectural structures within a room gave way to a powerful unity of theme provided by the rectangular shape of stretched canvas.