



An Examination of the Artistic Technique of Marbling on Fabrics using Acrylic and Oil paints

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Abstract

Marbling is the process of printing multicolored wavy or stone-like patterns on paper or textiles. To make the designs, the colors are floated on the surface of a liquid, and then paper or fabric is placed on top of the colors to absorb them. Some people still call marbling by its original Turkish name, Ebru. Marbling is a handcraft which invented or exposed in antique to decorate paper/fabric in a simple and hands-on way. While elementary in conception, it is really difficult to perform. The most notable characteristics of acrylic paint are its versatility and the wide range of ways in which it may be utilized and accepted to suit various methods. Oil paints varies significantly from one brand to the next, and the broad range often includes different color characteristics.

Key words: Art, Marbling, Color, Oil paints Acrylics, Textile, Fabric.

Introduction

Marbling is an aqueous surface design technique that can create patterns resembling those found in polished marble or other types of stone. The colors are floated over either plain water or a thick solution called as sizing, and then they are carefully transferred to an absorbent medium, like paper or fabric, to create the patterns. Although marbling can have as many steps as we like, it is essentially a straightforward process. There are broad laws, but as far as we are aware, there are no hard and fast laws. You gain knowledge by trial and error; what functions for one person may not at all function for another. The description that became the accepted definition of marbling over time was written by the renowned English marbling master Charles Woolnough shortly after the middle of the nineteenth century. It was included in *The Art of Marbling*, the first truly comprehensive guide to this previously largely undocumented technique for floating paper. started in 1985 and have been working at it full-time for almost 30 years. The practice of marbling involves printing multi colored wavy or stone-like patterns

on paper or cloth. The colors are first floated on a liquid's surface to create the patterns, and then paper or fabric is placed on top of the colors to absorb them. Even now, some people still refer to marbling by its original Turkish name, Ebru.

The genuine birthplace of marbling is obscure however the real cases have been established in Japan and China in twelfth century. This sort of marbling system, referred as Suminagashi, it was encouraged by skimming folded shades on the surface of water or gelatin. In Turkey during 17th century, marbling strategy was utilized on surface of water, Skillfully, Marjorie Lee. Bevis' strategy for marbling included by skimming acrylic paints on much thickened water and moving the paint with different instruments (Brushes, Needles and so on.) to make lovely shading full examples. Once a solitary example is made, the paint will be moved from the thickened water surface to paper or texture. For many years, It is used to make a pattern design on papers / fabric & also book covers. Its application & history goes distant separate. Marbling is a handcraft which invented or exposed in antique to decorate paper/fabric in a simple and hands-on way. While elementary in conception, it is really difficult to perform, for many of the mechanisms in the process are unstable & aggressive to one another. The procedure was called "Marbling", because the earliest examples seen by Europeans resembled the appearance, the process has continued to be chosen in this primal way (Wolfe R., 1990). Science & Art are inseparable go-ahead parts. Science contracts with knowledge and fact. Art plays a multiple role to divert those knowledge & realities from range of insight to zone of feeling and expression (Carina, 2001). The facts in technical point of view applicable, repeatable, and verifiable. Artistically facts are grounded on the properties, feelings, ideas and motives for material (Lembach., 1974). Fine art and knowledge about science integrating are not a novel event designed for frequent exploration conditions of emerging new knowledge and also technology world. The inception in between sciences and arts of the bridge is to extent over to 1960s (Bliss, 1985). The contentions on science and workmanship are remarked independently on owning implications, yet they unequivocal exercises of a social human. Science and Craftsmanship make different methods for psyche to run. In this technique, different implications between science and craftsmanship are incorporated to run different methods for mind (Garoian and Mathews 1996). Through blending science and craftsmanship, individual's express contemplations, sentiments and bits of knowledge, indicate changes and connections, to make forecasts and clarifications (Nelson and Chandler, 1999).

Review of literature

There are so many marbling patterns that can be talented with the use of rakes, combs, and other tools. Here are some good marbling books about this captivating skill: Marbling on Fabric by Daniel and Paula Cohen, Marbling Paper and Fabric by Carol Taylor, & Marbling by Diane Vogel Maurer and Paul Maurer. For more advanced marblers, see Marbled Designs by Rissole and Mimi Schleicher (Marilyn J. Brackney 1997).

Marbling craftsmanship activity is a specimen movement in coordinating science workmanship and creation. The organization of science and workmanship is to utilize a few properties of fluid and strong materials (Wein, 2007).

The marbling craftsmanship action methodology comprises of utilizing science and workmanship standards. Marbling craftsmanship blend is a graphical specialty of decorating assets, for example, texture, glass, paper and earthenware production by spread over shaded colors glided on a high density, (i.e. Coagulated Water) fluids (Kucinkas, Lee and Handrail, 2007).

Marbling is both an easy and hard craft! Don't be disheartened if your 1st attempts at marbling aren't as effective as you'd like. There are many variables, including heat and moistness, which can affect the outcome of a marbling meeting.

Test with changed filaments to perceive what works best with your paints. Silk is dependably an exorbitant decision since it ingests shading admirably and frequently has an extravagantly smooth, fine feel. For the Florence Bralette & Geneva underwear, we utilized a silk/spandex charmeuse, otherwise called stretchsilk. Linen, Cotton & different strands may be utilized and also synthetics. This is inordinate reason to go through the pieces you've been great (Scott, 1993).

Silk is a natural protein fiber of animal origin. The dyeing device of silk dependents on free amino groups, carboxyl groups & phenolic with accessible (OH) group. Because of slightly cationic character of silk with isoelectric point at above PH 5.0, it can be dyed with *anionic* dye such as acid, metal complexes, reactive and selected direct dyes. But the main objective of coloration of a textile fiber is that the perpetuity of the color and should not allow injury of natural abstract of fiber (Khan and Islam, 2015).

This recommends it ought not nullify its shading amid preparing following example and coloring and consequent valuable life (i.e. washing, light, rubbing, sweat, and spit). Silk hold little measure of figure. There are 2 principle sorts of silkworm, mulberry silk likewise called "cultivated silk" and wild silk of which Tussah silk is the most vital illustrative. The applications and employments of silk are numerous and differing, for example, floor coverings, weavings, embroidered artwork, providing, costumes between them. Silk has been utilized as ground strong for painting and additionally printing strategies (Scott, 1993).

A modern development, acrylic paint is manufactured by pigment bound in synthetic resin, such as acrylic or PVA. Advanced in the 1960s, it was initially used for painting ramparts. Acrylic is opaque, water, soluble, quick drying paint. The color, unlike oil paint does not alter with time and can be diluted to slide if required. It has been used to great effect in the paintings of David Hackney & F.N. Souza and due to its extremely versatile, fast drying properties, is very common with many artists in Pakistan. Acrylic is now unrecognized medium and many artists the world over are using it moreover singly or in combination with other mediums (Husain, 2008).

Material and Methods

The present-day study is a try to create marbling touch by using acrylic and oil paints and on the fabric. Marbling is a centuries old unique technique in which each design has individual pattern. Essentially, marbled items are created by means of a thickener in a shallow pan of Carrageenan / Size and floating colors transversely the size's surface. Different tools are used to create designs, the top of the Carrageenan / size, pick it up and solution it off. The design floating on the water is moved to the item. This inquiry makes use of optional information.

Following material is required for marbling technique.

- Silk fabric
- Oil paints
- Acrylic paints
- Turpentine oil
- Carrageen
- Container
- Blender

- Brushes of different sizes
- Comb
- Eyedroppers

The crucial details and the data is gathered from available research to analyze the case and experiment. Integration of intelligent systems with clothing, accessories, upholstery, or industrial, technical textiles should result in improved user comfort and performance.

Process of Marbling

Marbling texture is additionally an endless approach to reuse old hankies, and men's tissues are a decent size for making a Furoshiki. All together for the paint to hold fast enduringly to the texture, it's fundamental to absorb the material a blend of alum and water before marbling. Alum can reason a skin rash. Break up two tablespoons of alum (Potassium Aluminum Sulfate) in one quart of warm faucet water in a hopped. Blend until the point that the alum precious stones have broken up. Drop the material into the alum mix. Attempting elastic or liquid gloves, mix the fabric around to make sure it's systematically drenched. Wring the texture and hang it to dry. Press the fabric utilizing the cool to medium setting over iron.

The most significant features of acrylic paint are its versatility & the wide range of ways in which it may be used and accepted to suit different methods. The paint can be weak with water & used such as a water color, or it can be practical thickly like an oil paint. there adhesive qualities enable it be used on different surfaces & it is excellent for mix media collage and work. Once dry, the paint film rests flexible and would not yellow. Acrylic paint has little /no Adour. Use acrylic paint in strong water. However, many additives and mediums are available. All of them can be used to alter the handling the paint & create distinct effects.

Oil paints differ considerable from brand to each and brad range generally includes altered qualities of colors. Artist's qualities are the best they contain the highest grade and Sgreatest quality of pigment. Oil paints have unlike intensities of color range like cool colors have yellow and blue, white and black & tiny spots of red, for parlor tone add yellow & white. red color & brown color makes colors cool & gradually added blue and yellow help them more cool result. Finally add drops of black and white to make dark and light tones, warm shades contain red & black than slowly introduce white to the palette to brand paler tones.

Preparation of Paints for Marbling

Acrylic paints can be diluted with water to achieve the proper consistency for marbling, allowing them to float on the surface of the size solution (Figure no 1). The ideal mixture should resemble the viscosity of thin cream, though the required ratio varies depending on pigment composition, making preliminary testing necessary. Optimal results occur when the paint expands slowly into a circle 7–10 cm in diameter, known as a “stone.” If the drop sinks or remains compact, the paint is too thick and must be diluted. A common dilution ratio is two parts water to one part paint, with distilled water recommended in areas with high mineral content. If the paint disperses excessively, additional pigment should be added. Since paints from the same manufacturer may respond differently, each color must be tested before use.



Figure no 1: Preparation of paint for printing.

Addition of Colors and Pattern Formation

Before adding colors, the surface of the size should be skimmed with strips of newspaper to remove air bubbles and reduce surface tension (Figure 3.5). Paint drops are then applied using an eyedropper to check consistency. As more colors are added, stones begin to overlap and deform, which can be used creatively to achieve layered effects. Additional drops reduce visible background areas, producing regions of more intense color. Tools such as styluses, rakes, or combs may then be used to create freeform or traditional marbled patterns (Figure 2 no 2). However, excessive manipulation can cause colors to blend, resulting in a muddy appearance.

Figure no 2: Skimming off air bubbles



Figure no 3: Splattering the paint



Printing on Fabric and Tiles

To transfer patterns, the fabric is carefully lowered onto the size surface with the assistance of another person to ensure even placement. The fabric should remain in contact for about one minute before being lifted from the corners and rinsed with cold water (Figure 3.7). The same process can be applied to tiles and paper surfaces, with paper typically rinsed by pouring water over it to remove excess size.



Figure no 4: Rinse the fabric



Figure no 5, 6: Results of marble printing after finish

Conclusion

Marbling art on silk fabric by using acrylic paint are more durable color resistance instead of oil paint. It is concluded that acrylic paints are more durable and color resistance as compare to oil paint on the fabric of silk. It has been proved from several experiments that application of acrylic paints is most reliable ingredient for practical usage of silk fabric. The basic purpose of this research is to establish a framework that cause-and-effect relationship in textiles, regarding surface creation and its influence on chemical properties and fabric performance under many treatments. The surface of textile serves as a platform for functional enhancement, allowing material and requirements across applications. This article addresses fundamental aspects of all textile surfaces, their characteristics and their functional properties.

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