

## Introduction to "Ebru Water Marbling"

Ebru Marbling is the art of creating colorful patterns by sprinkling and brushing color pigments on a pan of oily water and then transforming this pattern to paper. The word 'ebru' comes from the Persian word 'ebr,' meaning 'cloud.' The word 'ebri' then evolved from this, assuming the meaning 'like a cloud' or 'cloudy,' and was assimilated into Turkish in the form 'ebru.' The special tools of the trade are brushes of horsehair bound to straight rose twigs, a deep tray made of unknotted pinewood, natural earth pigments, cattle gall and tragacanth. It is believed to be invented in the thirteenth century Turkistan. This decorative art then spread to China, India and Persia and Anatolia. Seljuk and Ottoman calligraphers and artists used marbling to decorate books, imperial decrees, official correspondence and documents. New forms and techniques were perfected in the process and Turkey remained the center of marbling for many centuries. Up until the 1920's, marblers had workshops in the Beyazit district of Istanbul, creating for both the local and European market, where it is known as Turkish marble paper. Like in other arts, Ebru Marbling is learnt in a "Master-Student" relation with many prominent Master (called Ebrizen) available in Turkish history. Although the art can be learnt with a single day practice but the real Masters of the art usually have spent lives in practicing new patterns to be perfect and their work is usually unparalleled and truly reflect the touch of genius.

Marbling art or Turkish Ebru art is one of the most beautiful examples of art in the world. It is an art that has differences from the other visual ones in the ways such as equipments used, performing style and traditional aspect and it is the art of paper decoration by spreading paints, which do not dissolve in water and shapes like clouds. It is a method of aqueous surface design, which can produce patterns that are the result of color floated on either plain water or a viscous solution and then carefully transferred to an absorbent surface, such as paper or fabric. Through several centuries, people have applied marbled materials to a variety of surfaces. It is often employed as a writing surface for calligraphy, and especially book covers and endpapers in bookbinding and stationary. Part of its appeal is that each print is a unique monotype.

Someone very rightly said once that "Ebru is not only an Art, it is also an epigrammatic poem and a heart felting melody...". In more literary context we can describe it as "the art, sprinkled on solidified water with

raising consistency substances like tragacanth having fluidity and transferring the pattern that is made by shaping dye drops on water". The colour is transferred from the surface of a liquid to the paper and hence the pattern is formed. It is a very enjoyable form of art but since it takes time and care therefore it requires patience and passion while performing. Ebru can be performed not only on the paper but also the clothes, wood and potteries.

## History of Ebru

Although it is not known when, by whom and in which country the art of marbling was born, there is no doubt that it is a decorative art peculiar to Eastern countries. A number of Persian sources report that it first emerged in India. It was carried from India to Persia, and from there to the Ottomans. According to some other sources, researchers agree that it originated in the city of Bukhara in Turkistan, and from there it spread via the Silk Road to Persia, India and Anatolia. Another research says that its origin might ultimately date back to China, where a document from the T'ang dynasty (618-907) mentions a process of coloring paper on water with five hues. The "Ebru Marbling Art" was named as "Turkish paper" during the 17th century in Europe. The oldest samples of the Ebru Marbling composed in the form of book dates back to 1539 at Topkapi Palace. Marbling used to be extensively employed in bookbinding and calligraphy. Occasionally, particularly interesting and attractive designs are used as display pictures in historical buildings. Turkey has produced many great Masters of the art, such as Hatip Mehmed Efendi (18th century), Şeyh Sadık Efendi (19th century) and Bekir Efendi (early 20th century). Amongst the recent great Masters produced after Necmeddin Okyay, both Mustafa Düzgünman (born 1920) and Niyazi Sayın (born 1927) are particularly worthy of mention. Ebru Art is one of the oldest paper decorative arts. It was first known as "Ebre" which means "veined" in Jagatai language (one of the central Asian Languages) in the history. Hatip Mehmet Efendi was known as one of the greatest Masters of the modern Ebru Marbling Art. He lived in the 17<sup>th</sup> century and he founded the technique of "touching the edge of needles rather than only spreading colors". His enthusiasm and passion for the art goes beyond an ordinary interest and can be visualized from the fact that he died while trying to rescue his "Ebru artwork" from the fire in his house.

## **Where to use?**

Ebru Marbling is a unique art which many painting and design lovers like to do in their spare time and especially demonstrate to their friends on different occasions. Nevertheless, this spectacular piece of art does have many applications in daily life where it is used to enhance the decor and look of the goods.

This patterned paper is extensively used in the binding of books and within the calligraphic panels in Turkey. In addition to this, "ebru" works are often framed as pictures and used all over the world as a piece of decoration. Other than paper work, the pattern is often designed on leather, glass, cloth, furniture, book covers, notebooks, invitations, and many other areas to reflect the unique glamour of this art.

## **The Essence of "Ebru Marbling"**

Ebru, an elegant example of art, presents us the mystery of the combination of micro and macro world. Each pattern has its own spirit of nature. Someone said that it has its fame with medical therapy as well where the peace and tranquility reflected from the art gives the viewer a sense of peace and calmness or, in other words, it "nourishes" the soul. Clarity of the water, ceremony of the colors, emotions of the humankind, perfection of the nature and the oneness of the creator is combined in this art. Ebru is the art that never loses its mysticism since it falls in our mind and to our heart through our eyes. The purity of water, harmony of the colors, diversity of the nature and abilities of the mankind gives the soul to the Ebru. If lead by the Master, one can learn in a few days to make a perfect piece of art. The visual elegance of this art gives positive energy to the souls and practicing it for sure gives much beyond that. It starts with a pulverizing practice of the dyes and this process takes the longest time to learn while taking Ebru courses. Therefore, it is an art, which requires patience and passion. The beginners usually are required to make up their mind if they are learning this art as a hobby or to be professional since the time, care and dedication required for each varies a lot.

## Types of Ebru

Throughout history the Masters have prepared many different types of Ebru. Each of these had their own names, reflects a unique art, itself is an example of creativity, sign of elegance and pictures the message for the nourishment of eyes and soul.

### A- Classical Types of Ebru;

**1- Battal - Stone:** The oldest recorded style in Ebru. It is the base of all forms in paper marbling art. The paints stay as they drop off the brush no other effect is given.

**2- Gel Git - Tidal:** After having a battal base, it is formed by zigzag movements parallel to the sides of the basin. This tidal movement is sometimes applied diagonally as well.

**3- Şal - Shawl:** Formed by an evenly spreading of two or three 'S' shapes on a tidal ebru in the opposite direction of the last tidal move.

**4- Bülbül Yuvası - Nightingale Nest:** Formed by inside to outside spiral movements next to each other on a battal ebru.

**5- Taraklı - Combed:** A vertically made tidal ebru is combed in the opposite direction of the last tidal movement.

**6- Kumlu - Sandy:** Formed by continuously dropping of low density paint on an extremely thickened basin and letting the work sit for a long time. The surface tension is high in an extremely thickened basin. The low-density paint is going to be pressured under the high tension of the surface and after a while crack and form the sandy or bony ebru.

**7- Hafif - Light:** Paints are diluted more than in other ebru types. Light ebru is usually used as a base to perform calligraphy.

**8- Hatip - Orator:** Motifs are formed by giving movement effects to the paints that are distributed evenly within each other on the surface. Colors at the background are light, motif colors are intense.

**9- Yansima - Reflection :** Forming pattern or writing by getting more than one reflection of ebru on the same paper. Interior surface of the pattern or the writing is covered with a fluid made of acacia Senegal or commonly known as gum Arabic tree. When the paper is marbled with darker colors than the first time, the gummed surface will not absorb the paint and is going to appear as a lightly marbled form. If the exterior surface of the pattern or the writing is gummed then the interior surface of the pattern will appear as darkly marbled.

**10- Dalgali - Wavy :** When the paper is moved back and forth during the marbling, the result will appear as waves on the paper. The paper can be folded, (creases point the surface) when each move contacts with a crease it will change direction and will form the waves on the paper. Waves can be formed only if the movement has a regular rhythm.

**11- Neftli Battal –Turpentine:** This is obtained by sprinkling paints with some added drops of Turpentine (preferably pine turpentine) onto a ‘Battal’ background. It gives a wavy appearance.

**12- Somaki Battal – Porphyry:** Generally made with two color. More gall is added to the second color, which squeezes the first color and creates thin veins, like marble.

**13 – Serpmeli Battal – Sprayed:** After any well known “Battal marbling” is made, a second color, in contrast to the background, is sprinkled in small droplets. The paint in the brush is squeezed out carefully, and some people use a special brush for sprinkling. This sprinkling may be formed in ‘Gel-Git’ – ‘ Bülbul Yuvası’ or other patterns.

**14- Ak Kase – Stenciled Marbling:** This is a pattern obtained by making several imprints on the same background, and popular with calligraphers. The base consist of a ‘light marbling upon which the script is written using a special fluid prepared with gum Arabic applied with a red pen or brush. Thus the surface of the light marbling is covered (insulated) by the gum Arabic. After drying, another design using darker colors is applied on the same paper: the parts covered with gum Arabic will resist the second coat and will therefore display the script. The same technique may be applied using a stencil, and other substances can be used instead of gum Arabic, for example heavy gum tragacanth, silicone, several transparent glues etc.

**15- Yazılı Ebru – Script Marbling:** This is obtained by writing the script with gum Arabic and then marbling the same paper, or vice versa (Leaving the script blank and applying the gum Arabic as background). Writing with gum Arabic (Transparent ink) demands particular skill, because it is very difficult to make correction. Collectors appreciate masterpiece marbling of this type.

### **B- Modern Types of Ebru;**

- 1- Fantazi - Fantasy
- 2- Kedi Gözü – Cat Eye
- 3- Dalgalı - Waved

### **C- Flowered Ebru;**

Forms of flower motifs are applied on battal ebru. Application process is quite different from oil painting. Ebru master has to form the flowers and get the image on paper rapidly, before the paints on the water start cracking. Therefore this art should not be compared with the art of painting.

- 1- Lale - Tulip
- 2- Karanfil - Carnation
- 3- Sümbül - Hyacinth
- 4- Demet Çiçek - Flower bunch
- 5- Renkli Menekşeler - Multicolored violet
- 6- Papatya - Camomile / Daisy
- 7- Gelincik - Poppy
- 8- Gül – Rose
- 9- Buket - Bouquet

- All these different types of Ebru have their own combinations of dyes, drawing techniques and have different levels of difficulty in preparation and different methods, in general, but the equipment used is almost the same for many of these types. Through practice and passion, candidates can learn all of them and enjoy the perfection of this beautiful art.

## **Materials used in classical Turkish Marbling**

**Our Professional Marbling (Ebru) Set is available for supply in our centre. Interested parties are required to pick it up from our Centre since the delivery service is not provided.**

- **Basin – Tray (Tekne)**: It is the container in which the Ebru is prepared and it can be made from galvanized plate, chrome, glass or wood. It has to be 1-2 cm longer on each of its side than the size of material (paper, etc.) you want to work with. The size of a typical ebru tray is 35 cm by 50 cm long and 5-6 cm in depth.

- **Gum Tragacanth (Kitre)**: It is the name of a herbal liquid called "geven" and it is used to adjust the density of water. The extract from some plants like see-cord, salep, linen seed are used for making gum tragacanth. In appearance, it is a gum like substance, which is readily available in herbal shops.

- The preparation method is; Put 50g Tragacanth power (Kitre) into 7L water and leave it for 10 hours. After that it is ready to be used.
- It can be preserved in refrigerator for around 1 month without souring.
- The bad smell means it is already soured.
- Normally a dilute solution gives a better result. A good compromise comes with blurry water.

- **Dyes (Paints)**: The colors used in marbling are obtained from different natural substances such as soil, lahor indigo etc. The dyes are liquid and are insoluble in water and are not affected from sunlight. They are sold as oxide and pigment paints in the powdered form.

- The preparation method is; The marbler has to mix the oxide pigments on a marble or glass surface for 1.5 to 2 hours using a special technique. Then the paints have to be left standing for 1-2 months. After that the water is drained away and the sinked colors are used. (Our pigments are ready made and are in the cream form)
- There are no specific measures for the dyes used in the painting. Different pigments have different characteristics and therefore the preparation of dyes requires verification with water and ox gall.

- **Brushes**: They are made of horsehair with a rose branch handle. They are preferred over modern brushes due to light weight of the rose bud, its flexibility and that the horse hair does not absorb dyes.

- They are prepared very carefully with a special technique to tie up the hair. The length and thickness has to be proper for perfection in the

Ebru artwork.

- **Oxgall or Bile (Öd):** It allows the paint to disperse over water without precipitating. Oxgall (not synthetic oxgall) comes from a bovine bladder and it can be obtained from slaughterhouses. If it is boiled with the 'double boiler' method (bain marie), then it can be preserved and used for a long time.

- Ox Gall is the major item of the Ebru.
- In the past, Ebru Masters also used tobacco leaf water.

- **Paper:** The paper has to be a good absorbent and a better quality of the paper gives better results. It has to be clean and smooth and also it should be about 1 cm smaller on its each side than the tray. The color mostly preferred is the cream color since it provides a very good contrast against all bright colors.

- **Needles:** They are used to draw the Ebru.

- **Desteseng:** Special marble tool (stirrer) which is used for stirring the paint.

- **Kitre Bag:** It is a special bag made from an American material. It helps us to filter the Kitre.

- **Spatula:** It is used to mix the tray.

- **Glass Jars:** Paints are kept in jars and some empty jars are also always kept beside the apparatus for making some new dyes.

- **Tub:** It is made of galvanized iron, steel or aluminum with a size of 5x35x50cm.

- **Comb:** Hand made combs.

- **Water:** In ancient times, Masters were using the rainwaters but now, as the rain water is not so pure due to pollution, the Masters prefer distilled water. The water can be simple tap water but it must be as clean as drinkable water.

- **One thing worth mentioning here is that if you are using tap water then you cannot preserve the solution for more than 2 days.**

## **Preparation of some tools used in Ebru**

(Please ignore this part. All tools below is ready to use at our centre)

### **Making a brush**

You should go to a place where you can buy horsehair approximately 5 mm diameter and also 15 - 20 cm long wooden or plastic stick, fish line and scotch tapes.

Follow the instruction shown above figures:

- 1- Put some horsehair which is cut about 50 cm in length. Take some pieces of scotch tape and cut them longer than the length of the brush and sticked it onto the horsehair. Turn it around so that sticky part of the tape would be upward.
- 2- Put the brush to the tip of a non-sharpened stick and make sure that the tape attaches the brush tightly attached to the stick.
- 3- Roll the stick until the whole tape is attached to the brush.
- 4- As seen in the picture, make a round with a fish line. The knot should be placed the top of the horsehair and the end of the fish line should be directing opposite side of the horsehair.
- 5- As seen in the picture, roll the fish line tightly over the part of the horsehair, which the scotch tape was attached, then tie it by putting the end of the fish line through the hole made previously.
- 6- As seen in the picture, pull the other end of the fish line until it becomes invisible underneath the rolled part of the fish line.
- 7- Then cut the extended part.

Now your brush is ready.

## **Making a comb**

### **to make:**

**1-** Use a hammer to drive the nails into the surface of the first wooden piece. Make a triangle shape with the nails. With this comb, you can make “oyster shell” marbling paper.

**2-** Use a hammer to drive the nails into the side of the second wooden piece. With this comb, you can make “comb shape” marbling paper.

**3-4** You should make sure that the part, from which the nails stick out, is directing inside the tray, and the wooden pieces are bigger than the tray so that the whole thing wouldn't go in the tray.

## **Preparing paint**

The powder paint is not to be used in that original form. You have to mix them with water until they become pastes.

**EXPLANATION:** The water that you are going to use must be pure. (Car Battery water is perfect) Put some powder paint on an approximately 20 x 20 cm glass with spatula. Make a space in the middle of the powder paint, then put pure water in it. Start mixing them until they become pastes. Now put the paste into a cup. Whenever you want to make a marbled paper, take some of THA paste that you previously made and add some “Ox Gall” in it (approximately one drop for each tea spoon size of paste). If you can not find Ox gall you can use Photo-flo instead.

\*The paints are land-based metal oxide paints and plant-derived water-insoluble dyes

## **Gum Tragacanth**

Is the plant growing in the fields of turkey. People scratch the plant and let the liquid go out and get dry for about 3-4 days. Then they collect it to use. There are 2 ways to use it. One using the soup shaped tragacanth directly into water and prepare the water within 8 -10 days the other is to make powder of it to prepare water within 8-10 hours.

**Explanation.** The water in the basin need to be intense to keep the heavy colors on the surface. Regarding to this we need to use Kite which is Gum Tragacanth. If the water has not enough gum tragacanth it makes the control of color hard. If much, it do not let colors get widen.

So the intensity is quite important.

**Preparation;** Put 1.5 lt distilled water into a well cleaned bucket (If you use tap water, it will affect to your preparation due to the chemicals in the water). Then put around 1 tea spoon of the tragacanth into your water. After that mix it for around 10 min (Until all pieces of the tragacanth disappear. Afterwards cover your bucket with something to keep water clean for at least 10 hour. Now your water is ready to use.

## **Steps of making**

### **1- Prepare the mixed water**

It is very crucial to reach appropriate density for dyes to float on the water surface; otherwise dyes might be accumulated at the bottom of the container. So, Ebru artist should strictly follow the resting time of mixed water and water-gum tragacanth measurement.

First, add 3 teaspoons of gum tragacanth in to a gallon of distilled water. Then, mixes the water until gum tragacanth melts completely. After it is melted, leave the mixture to rest for two days. At the end of the two days, the mixture is formed into a thick-sticky liquid, which has proper density for Ebru art.

### **2- Prepare the dyes**

For each dye, make sure having enough empty bottles. Mix 2 teaspoon dyes with one cup of water in the empty bottle, then add 2 oz. Ox gall. Now, liquid pigments can be used for Ebru. (Actually all dyes have different characteristics. So no exact measures for this process. It depends on trials)

### **3- Prepare the container**

Pour the gum tragacanth mixture into the metal container, and make sure that there are no bubbles on the surface. Shaking the container or a flat stick may help dispel the bubbles.

### **4- Sprinkle the liquid dye**

Dip one of the brushes into dye bottle-for this step dark color can be used- and sprinkle it onto the water surface. One of the best way to do it is tipping the top of brush on other hand, so paint drips do not disperse all over the water surface. After four or five times tipping, the dye must paint the entire surface, which also is the background of the design.

### **5- Sprinkle another dye and shape**

Now, the same sprinkling process is applied with different color, but tipping the brush only two or three times. Wait a few seconds so dye drops expand their circles on the surface. Then, with a needle stir the floating color and shape it into a flower, if desired, or any image. After shaping the flowers, sprinkle green dye, or any color, closed to the flower image, and shape the stem of the flower. If you sprinkle too much green on the surface, do not touch them and just leave them on the surface; they will not be seen once the design transferred to paper. As many possible as images can be practiced at this step. If you cannot obtain a nice shaped image at the first time, do not give up and try one more. As I said at the beginning, Ebru art requires time and patience, so practice and practice.

### **6- Place the paper**

After shaping all the dye drops, place the absorbent paper onto the water surface. Then, gently lift the paper off and put it on a table by facing the color side up. Wait until the paper dries out; this process might take up to two or three hours.

### **7- Have a piece Ebru!**

Now, you are an Ebru artist and you can be proud of yourself as being one the few Ebru artists in the world! You deserve to have a nice frame to put your first Ebru work.

## Steps of making (In short)

- 1- The basic technique, which throughout all its historical variations, has never changed.
- 2- The process is always the same: paints are made to float on the surface of water where they are manipulated into designs and then transferred to a sheet of paper. (In order to make this happen, the artist must learn to control the behavior of the paint. The moment the paints hit the water, they will either sink to the bottom of the tray (and darken the marbler's day), or magically float and spread, enabling the marbler to coax them almost effortlessly into liquid swirls.
- 3- First a solution of gum tragacanth is placed in deep tray.
- 4- The origin of the method of preparing the pigments is another mystery. Having been ground to a fine powder the pigments are mixed with some kind of solutions. Then one or two small spoonfuls of fresh cattle gall are added to aid surface fluidity. The paints are now ready to use.
- 5- Beginning with the darkest color, **the paints are dripped or sprinkled onto the surface of the solution with a brush.**
- 6- Dipping a stiff hair or stick into the water, the paint is gently swirled into the desired pattern.
- 7- The sheet of paper is now gently placed on surface of the solution, and after waiting few seconds carefully lifted.
- 8- Now your Ebru is ready.

## Quotations regarding Ebru!

The following quotes can help you comprehend the essence, serenity, beauty and elegance of this beautiful art.

- Learn the secrets of creating the rich patterns of handmade marble paper.
- Experience the sensuous flow of Ottoman Marble (Ebru).
- To obtain beautiful Ebru results, one needs to have a light hand, refined taste, and an open mind to the unexpected patterns forming on the water. Patience and a good knowledge of traditional culture are characteristic of Ebru masters.
- In Ebru art, you can draw flower figures that are traditional from the Ottoman period BUT the things that you can capable of by using Ebru art is unlimited. All you need is your imagination.
- We congratulate for your interest to the Art, which goes back to 9<sup>th</sup> century.
- While we aimed to update the methods of the Art by using contemporary ideas, we would like to keep its nature and tradition in our courses by our majesty.
- One another aspect of learning *ebru* is that it teaches and develops positive thinking, gentleness, motivation, creativity (given as a gift in our nature), discipline and self-confidence.
- Ebru not only give elegancy onto your books or decorating your walls but also reveal the beautifulness of your soul.
- Ebru Marbling art helps to convert negative energy to the positive, which we encounter in our daily social life. During the courses, Ebru will bring the positive energy to your body and soul, which you always loose, in the life. It will be a treatment to you by God's will.
- Ebru will teach you patience and steadfastness.
- You will observe the colors dropping in your tray with enthusiasm and excitement and you will wish that they never stopped dancing on the water.
- You will desire the permanence of the spiritual serenity of the Ebru, which it puts, in your life.
- All Ebru has the sign of the moment..
- While practicing Ebru art in our Centre you will observe yourself falling in love with it very soon.
- Nobody can say to an Ebru Master that making colors dance on water surface is impossible.

- The philosophy of the Ebru; Sometimes you look up to the sky during dawn or dusk; then you realize a birth of Ebru by the holy colors red, yellow, blue among the clouds. You also may come across the spreading dark blue and lightening white colors into the basin of the Ebru as wide as the cloudy sky in the night. After all these! Our artisan ancestors tried to reflect this beautifulness into the trays and to the papers. After that all Masters moved away from their egos and reshaped their souls in the trays of the Ebru. They melted their icy hearts into the warm pools, which welcomes all to get warmth. Afterwards his/her own tray (heart) became as big as oceans and cosmos. And s/he verified the sayings "You consider yourself a tiny object, however all the cosmos fits in you as wrapped (as a summary)"

### **Some of the famous quotations about Ebru:**

One of the greatest Ebru Masters of the 19th century, Ethem Effendi said that:

**"Ebru is like magic, sometimes it works and sometimes not."**

One of the best contemporary Ebru artist, Mustafa Duzgunman, said that:

**"Ebru has perpetually changing harmony, and requires great dedication and patience."**

The greatest known Sufi Mystic, Mevlana Jalaluddin Rumi, says:

**"I have searched all over the wisdom councils; then learned wisdom comes later but decency comes first.."**