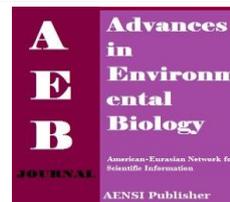




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Characteristics of proper paper, ink etc. in calligraphy

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ABSTRACT

Due to the importance that the paper, specifications of appearance and its painting have in calligraphy therefore, this paper seeks to examine paper in its correct form. Thus, this article defines the paper, the appropriate paper for writing papers of various traditional calligraphy including Chinese paper, Khataie paper papyrus, paper-Baghdadi, silk paper, Dowlatabadi's papers and Dolatshahi and Adilshahi paper, farangi's paper and colored paper discussed to the traditional method. Regarding painting of paper, it is mentioned that three methods commonly used with different materials. In the first method, the amount of color is added during the manufacture of paper pulp. In the second method, the paper surface cover using a brush or sponge impregnated with paint, paper is coloring. The third method involves total immersion into the paper in colored liquid that herbs coloring materials like tea, onion's skin, walnut's skin, henna and etc are used. Next in the article, we also discuss the topic of cloud and Zarafshan painting and its types and finally starching of the paper, beads, paper tagging, ink and its variants, inkwell, Lyqh, cutting devise, subordinates, mosatar, pen wipers, inkwell water, clamps and templates were reviewed.

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INTRODUCTION

Definition of the paper: Based on what is in Dekhoda's dictionary, "paper" is a Persian word and said to sheet a made of cotton pulp that is used for writing. We further define that the paper is a thin sheet that is produced by the paste of various materials plant, cotton, flax and etc to different colors. It is used mostly for writing. It is said that the origin of this word is Chinese and it is believed that its origin should be sought in Turkish language.

Whatever its origin is, it is certain that the paper went to Arabic through Persian language and culture and is defined as the paper (its plural is Kavaghiz).

Features of suitable paper for writing:

Being Smooth and flat of the paper are the most important features of the writing paper because if paper's surface is boisterous and rough, it wears and roughens the fiber under the tip of the pen and if paper's surface is slippery and glassy, during writing, it diminishes from its authority and dominance. Thus, surface with the mid texture and translucent and is proper for writing and one of the best papers between all kinds of it.

Types of traditional calligraphy papers:

Porcelain paper or Khatai, paper Brady, paperBaghdadi (Qlqshndy, am Alashy, Volume II: 476), silk paper (mayel Heravi, words: 70), Heart deer Glassine, parchment (Salby, facetiae: 261), parsley paper (Ibn Nadrim, Isaac, Fihrist: 36), Amoli Paper, Paper Pharaoh, Samarkand paper, Khonji paper (like Heravi, noble, book layout, vocabulary), Damascus paper, Dolatabadi papers and Adilshahi Dolatshahi (High Effendi, virtues Honarvaran: 11) Farangi paper.

Coloring of paper in traditional methods:

Color is an integral element of nature. More materials of the world from animate and inanimate, have benefited little and more color. Many of the objects and phenomena shows as rainbow shapes: The various colors of rock and soil and water from the eruption of colorful plants and flowers and birds and magnificent plumage shining glamor and fantasy unstable amazing rainbow.

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But on the other hand, its identifying of color is another story. Light-sensitive receptors that are in a complex network of nerves in the brain, are responsible for the amazing work of vision, in the hierarchy of life, in terms of Decomposition of light and specifying of color, are made major differences between organisms. Human in terms of vision undoubtedly is more unable from many animals, But via a much more complex device of his brain, compensate his poor vision and identify a wide range of colors. The human uses color in the celebrations and his various ceremonies And increasingly learns numerous ways to obtain color from the nature.

Hence, the beginning of human life has been buried in the dark depths of dyeing in ancient times, and never can be determined a certain date for it. But it is certain that over time and with the development of human societies, simple style color became to more sophisticated methods .for coloring. In addition of human use from mineral types and different parts of plants (stems, roots, leaves, flowers, bark, seeds) also gained diverse colors from insects and pests.

The colors in the painting are usually used in a variety of colors including physical colors (mineral) that are non-transparent and are opaque beyond and because of their concentration, they are not proper for coloring of paper and calligraphy, but, they are appropriate for miniature and illumination. But the emotional colors that taken from plants are good suitable to painting of paper and calligraphy.

Important reflect of dyeing industry with natural materials leaves its more usage and performance to art and craft, Coloring using traditional material dyes such as walnut's skin, madder, pomegranate peel, and other similar materials, provide combined low-price colors constant that remain and secure hundreds of years against light and air and other environmental factors. Spread cultivation of industrial plants, in addition to increasing the benefits of green space and reduce air pollution emissions as well as reducing the use of chemicals that is directly effective And can become an important factor in maintaining a healthy environment. in terms of Individual health also working with natural ingredients prevents from respiratory and skin diseases caused by chemicals.

Here we refer to some of these dyeing plants that are used in paper dyeing and etc:

Pomegranate skin, walnut skin, madder, mignonette, beets, indigo, blood Siavash marigold, safflower, saffron yellow, orange, colored ale, red, straw color, the color of recurrence, fawn color, color fariseh some takhak mallow, some ovata, some Rhubarb extract or Rivne, blue, indigo color, marble color.

For paper painting usually three methods with different materials are used. In the first method, the amount of dye is added during the manufacture of paper pulp. In the second method, the paper surface is coloring using a brush or sponge dipped in. The third method involves immersion of the paper in colored liquid that often use from herb dyes materials such as tea, onion skins, walnut, henna, etc. For dyeing of the paper with the plants that making color, first cleaning some of its materials and heating the water. When the soluble completely became colored, passing it through the filter and put in a place away from dust until its become cool. From this soluble can use for coloring in all three described and explained methods. The darkness and the light color of the paper, depends on the concentration and opacity of obtained colored soluble. The most common method of coloring paper, is an immersion method. In this method, selecting a flat and flange container, proportional to the size of the paper and throw the soluble diluted color in it. Then immersing the paper gently in it so that colored liquid covering all of its surface, Whatever the duration of paper's stay, is more in soluble, its color will be darker.

After removal, spreading out its papers on a clean cloth till they dry. To smooth the paper, after Semi-drying, can put it between two white paper and Ironing it.

Table 1: of color materials and their coloring.

The obtained color	Color-causing substance	column	The Obtained color	Color-causing substance	Column	The obtained color	The obtained color	Column
Yellow	Sunflowers	19	Greyish red	Mountain Road	10	yellow	barberry	1
Yellowish green	Tobacco	20	Dark gray or brownish	walnut	11	grey	Raspberry	2
Lemon Yellow	Brassicaceae	21	Lemon Yellow	Mignonette	12	orange Yellow	Marigold	3
Dull yellow	Pistachio Crust	22	Brown to red	Beet	13	Purple	kingberry	4
Yellow	Turmeric	23	Violet Purple	Black raisins	14	red	Oxtongue	5
Dark or light brown	Tea	24	Violet Purple	Red raisins	15	red	Madder	6
Yellow	Grape leaves	25	Purple	plum	16	red	Mallow	7
			Orange-brwon	Onion	17	Yellow brown	Buttonwood leaf	8
			Orange Yellow	Saffron	18	Yellow	Straw	9

Red seed color (Kermes, cochénilla):

cochineal is Best animal dye material that alone , in combination with herbal colors, getting the different light colory shades from it.

coloring Cloudy (Papier marbre, marbrure):

Cloudy is a kind of decorative and art painted papers that with combining of different shape's colors can be seen in in the form of cloud or raging water. Paper cloud is used for decorating of the margins of liner exquisite books, scrapbook, spare text line and painting, on the cover, liner escorted books and etc.

Cloudy Blue (Cauleur pour La marbrure):

Cloudy paper is made of two ways, cloud starchy and cloudy blue, blue cloud materials including moasfar flowers, turmeric, indigo and ink, etc. The manner that is still used in Iran, in the cloudy water usually used of bright colors and in a cloud of starchy garlic colors.

Cloudy Zarafshan (Semis d'or, Sabage):

Making of Cloudy Zarafshan was not common in the past, but recently interested in making such a cloud. To build Cloudy Zarafshan, because can not throwing the gold soluble due to its high specific gravity and deposited on the enamel, on the paper while is still wet, throwing Barberry and after drying it, verterbarling its paper so that it becomes to bright and shiny.

Zarafshan paper (Papier semisd'or):

In Dehkhoda's dictionary it means something that been sprayed tiny gold or gold dust on it. But in the Afshangran and Kaghzgran's term it included of spraying crushed and solved small droplets of gold and silver or pouring and sifting of gravels in the form of gold and silver dust on paper.

spray has different and various kinds:

Bikhteh spray, parisheh spray, moor's eyes spray, sarmori spray, dust spray, linnaeus spray (Semis d'or poussiere), semi or middle spray (Semis d'or moyen), silver spray (Semis d'or argent).

Throwing strach on the paper:

Papers that have been painted, usually has a rough surface and not suitable for calligraphy and etc. Hence calligraphers and painters to fix the problem, starch that paper with glazed materials and then vertebral them. This action cause that the texture on the paper become smooth and flat and a proper protective shield or awning is created for the paper. From substances that have capability of starching the paper can refer to Mallow woman, syrup, wheat starch, rice Glaze, Gum Arabic, asperzeh, fenugreek, honey, gelatin.

Marbling of the paper:

Marbling method is an approach in which we smooth the contours of the paper and paper's texture is become uniform and glossy so that its find the capability of implementation of calligrapgy. They are usually doing this act after the starching. For marbling can use from the agate and jasper stones or shell and marble stone that have a smooth and polished surface. While the marbling, the surface Under the paper, must be completely flat, without bumps or dents and with the appropriate strength. To do this we can use from glass. Put the paper pn the glass and start vertebraling of the paper with uniform pressure form one side with flat marble stone. If you look at the paper in the light, the glossy parts are marbling and the opaque parts are not marbling.

For marbling the paper in a form of opaque, can use from a paper-thin while marbling the paper. As a result being smooth and flat of the paper is from important features of writing. Because if the surface of the paper is rough and hard, it worns and roughs the fabric under the pen tip and if the surface of the paper is slides up and glassy, it reduces from the authority and dominance of the writer. Thus, the surface with the sei or mid texture is the best choice and option to writing. Also the white color hurts the writer's eyes and because of this matter, paper is coloring with the painted or colory dyes that were explained and especially straw-colored or light cream has been the interest of the writers from the past and is suitable for the writing.

Ink and its variants:

ink, is a black material that obtained from different materials, that imputed the pen tip with it and writing it on the paper. Darkness, pencil, zigab, vicalab, soot of the ink, naghs, ink's darkness, ink has an excellent value among calligraphers in terms of calligraphy and shorthand and the remainder or survival of the line, of the point which knows the one/fourth of the godness of the line is related to the good ink and have called it good pencil ink.

Thus, had a plentiful attempts in providing the mentioned components and percision in their combination. The first component of the ink is the soot that have been obtained from oil, rapeseed seed oil and flax oil and sesame oil and materials such that.

In addition to soot, ink has another components such as zack or alum, that becomes dark because the water is not reached to that And other component is the tenderloin, tenderloin part of the oak tree sap that is collected at the point of holes and finds bumps state that it is called tenderloin. In addition to black inks, there exist the colory inks that are in three kinds of mineral, vegetative and industrial.

Colory inks have a variety and different kinds that includes of:

1. Peacock feather Ink: The Ink looks like peacock feathers shiny and smooth, and is resistant against humidity and water.
2. Fariseh ink _: is a color that has been achieved from combination of tenderloin, Bluebeck.
3. Ruby red ink: Color shine is like a ruby.
4. ink tinny: is a combination of tin and quicksilver and equally, molten the tin and poures quicksilver onto it and made it in three layer that becomes soft. Then added Arabic gum to it.

Inkwell:

As it came in definition, ink is a small container that writers poured ink or darkness or hebr, and while writing, picking up the the pen tip from it.

The size of an ink pen must coordinated, meaning that for the dust stylus, writing and headings the size of inkwell should be both small and proportional to them so that can picked up and use the desired stylus and As noted above, for each pen must be double inkwell prepared until it becomes dark and makes Tahrir difficult, pour distilled water in it and put on a side and can use from the second inkwell that its concentration of ink is became proportional. And for the writing paper, medium ink and for Jali's pen of pages and scrolls that is needed to more picking of ink, is also needed to a large inkwell.

Another features of inkwell is that the crater, must be wide and shallow so that the writer, see its size of the stylus correctly and picked it.

The string of silk in the name of ligheh:

jahiz said that:" whenever put the wool, cotton and the things such that in the inkwell and to be encouter to stylus, is called ligheh".

Best ligheh made from rough silk because as it is dumped at the same time, it does not stick together and also not touched the pen tip. Scribes replaced ligheh after a while, as Aladdin have said: writer must change the ligheh of inkwell once a month and doesn't let that dust and soil sit on it.

In Arabic language, in terms of kind of ligheh, given the separate names to it, for example if lighe is from cotton called it keresf and if from silk or wool, is called beres, tot and atab.

Cutter:

cutter should therefore be relatively hard and smooth and should not be rough and lumpy so that the pencil becomes rooted and have said that And the hard wood and bone like ebony and ivory is good, and some think it is good that it is made of white horn rather than bone, because its getle and mild or soft and agrees and also is decent that keep the pneknife's tail from pouring and breaking.

Other objects can be used such as and compressed and hard plastic and rubber. Is necessary to remind that the physical form of the cutter especially above of it that is used, should have high arches and archy so that the act of cutting done better and more convenient and the part of are underneath or under the cutter that placed on the desk be perfectly smooth. The size of the cutter is often long such aas one finger and its thickness is 1.5 cm, but there are other sizes.

A thing for writing that is put under the hand:

A device made of leather, plastic, paper, foam and wood that is then placed on a page of calligraphy works and the write, but this device except a strength of the sheet, also causes an ease, and smoothness of the stylus or pencil's movement. If this device is selected of wood, its surface should be smooth, soft and gentle, and to do this, attach leather (natural or artificial) or the foam on the wood of this device and then use it.

Lined:

Is from the equipment and instruments of writing that today is used ruler. Doing the lined of the paper was in this approach that they picking the cardboard And have been embedded the silk threads on it to fit intervals or distances of the rows, so that they put the paper on the lined and did marbling or thronged on the strings a little with the fingers to the extent that the shape of the silk yarns remain on paper.

Today, using a ruler to draw a line on the paper with the proper drawing line distances and drawing the frame and placed under calligraphic paper so that the appropriateness and distances between rows is respected uniform and equal.

Pencil eraser:

For pencil eraser are usually used wool or silk fabric pieces and other things like that are used. Ans has two colored sides. Calligraphers after the writing, have been cleaning their tip with these fabrics so that ink not dried on it. Generally, have provides these pieces rounded and clefted, and sometimes is the rectangle.

Inkwell's water:

Inkwell water is small and elegant spoon, that has a slender and stretched tail and would have poured water into the inkwell through it But today, for the convenience of the work, they use from the dropper or a small container that according to the power of drop by drop of the distilled water ,they shed "Gulab", basil water, hulls water, cold boiled water in the inkwell And its form such instruments taht calligrapher should always has beside his hand So that when the ink became thick and had not a good stretch, to adjust the ink thereby or by this way again.

It is better to pour water under ligheh so that the diluted and precipitated Ink comes to the surface of ligheh and if we pour it on ligheh, should shake ligheh so that the ink concentration become homogenous and uniform and for shaking ligheh, using from a device that is made from wood and is spony that in arabic called malvagh and chamchamih.

Cleat:

A clamp or cleat is an instrument that makes strong paper with that while calligraphy and writing so that has not any slightest movement while calligraphy. For large sheets and inscription writing, by adhesive tape on the table attach along with a firm handy device so that while writing, the paper has not any movement and calligraphy has its enough dominance or master on the paper.

Crux template writing:

The stencil or templet is a plastic, cardboard device and the thing such that, that used for drawing lines cross, in up and professional calligraphy writing courses. Template for different sizes of the font is different and must be created separately. Another tools and devices that are used so much in calligraphy and writing, are many small rulers and big bevels and (T) ruler that uses for the piece writing and inscription writing.

Conclusion:

Given the importance of paper and its color in calligraphy, this matter was review. Finally, it was concluded that being mild and smoothness, is from important characteristics of writing paper because if the paper surface is rough and coarse, it worns and roughs the fiber under tip pens and if paper's surface is slippery and glassy,diminished the authority and dominance of writing while doing it. Thus, surface with the middle and translucent texture is proper for writing and is one of the best papers.

Concerning coloring of the paper also expressed that for coloring the paper, usually three methods with different materials are used. In the first method, the amount of dye is added during the manufacture of paper pulp. In the second method, the paper surface using a brush or sponge dipped in color, paper is stained. The third method involves immersion the paper in colored dyes that often herbs material are used such as tea, onion skins, walnut, henna, etc.

Papers which have been colored or painted, usually have rough surface and not suitable for calligraphy and so on.

The calligraphers and painters to fix the problem, are starch that paper with glazed materials and then doing vertebral it.

REFERENCES

- [1] Ibn Nadim Varagh, 1996. Translated by R. Tajadod Mazandarani, Tehran, 1343. Asmy, Image and Beauty, Volume I, Afshar, Victoria, painting with natural ingredients, University of Art, Tehran.
- [2] Salby, Abdul Malik ibn Muhammad, Lataefol Maref, 1998. Translated by Ali Akbar Shahabi, Mashhad, Dehkhoda, AA, Glossary, Tehran.
- [3] Salooty, R., 2010. Dissertation writing in calligraphy, toys, collars Publications, Tehran.
- [4] Semsar, M.H., 1989. Sizing and Nut Dark, Great Islamic Encyclopedia, Vol 2, Tehran.
- [5] Alii Effendi, M., 1990. The virtues of artists, translated by Tofigh Sobhani, Tehran.
- [6] Qlqshndy, Ahmed, Sobhol Alashy, published in Cairo, Egypt.
- [7] Qummi, Qazi Ahmed, Gulistan, 1973. Art – efforts by Ahmad Soheili Khonsari, Tehran.
- [8] Mayel Heravi, G., 1974. Vocabulary and terminology of technology books, Tehran.
- [9] Mayel Heravi, G., 1993. Book layout in Islamic civilization, Astan Quds Razavi. Moin, M., Persian Culture.