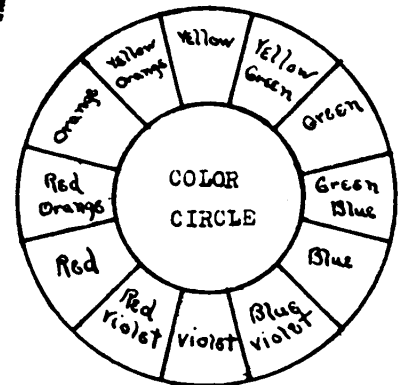
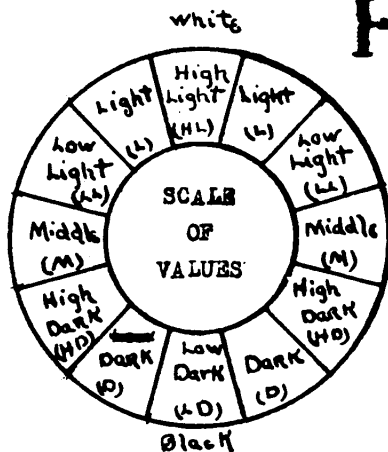


HANDWEAVING News

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12489 Mendota Ave.
Detroit, Mich.

NOTES ON COLOR



Color is a very inexhaustible subject in its many phases and in nature. In these brief notes, I shall only attempt to give you a few suggestions and color problems which will point out the way for the study of color in your weaving.

Definitions. Color is the effect of light on matter. As the rays of the spectrum fall upon a surface, certain ones are reflected and thereby passed on to the human eye, and others are absorbed. The hue of a color is the chromatic quality which is indicated by its name, - as red, red violet, violet etc. In order to change the hue of a color, we mix it with another color. By value we mean the quantity of light and dark in a color, and refer to its relation to white and black. In order to change the value of a color, we must make it darker or lighter without changing its hue, by the addition of white to make it of lighter value, and the addition of black to make it of darker value. The scale of values, as given above, represents the different values from white to black with the corresponding names of these values. Middle value (M) is the value half way between white and black; Dark (D) is an intermediate value between black and middle value; Light (L) is an intermediate value between middle value and white; and between these intermediates the values, - Low Dark (LD), High Dark (HD), Low Light (LL), and High Light (HL). Many others are possible, but these values of gray may be used as a measure of comparison. A value scale of each hue may be made in the same way as the gray scale, with all the gradations from white to black. By intensity of color, we mean the amount of its brightness. Each color has a saturation point where it reaches its fullest possible brightness or intensity. Intensity stands in opposition to neutrality in which no color may be distinguished. The more color we have, the greater the intensity, the less color we have the greater the neutrality.

The scale of hues of the color spectrum are given in the color circle above in order to show their relationship and position with regard to each other. They represent a fairly even gradation of hue, and their position on the color circle also shows the value at which they reach their fullest intensity. As for instance red orange is at its greatest intensity at middle value. The colors opposite each other on the color circle are complementary to each other, as for instance violet is the complement of yellow, orange is the complement of blue, green is the complement of red etc. If you mix equal parts of complementary color, the result is a neutral gray. Yellow is placed at the top of the circle as it is the lightest in value, violet is placed at the bottom of the circle as it is the darkest in value. The other colors range in value according to their respective positions on the circle.

For further study, I wish to refer you to the following excellent books which discuss color very completely, -
 "Enjoyment and Use of Color" by Walter Sargent, published by Scribners N.Y. 1929.
 "Study of Color" by Michael Jacobs, published by Doubleday N.Y. 1927.
 "A Theory of Pure Design" and "The Painter's Palette" by Denman W. Ross. These two last books are out of print, but may be obtained from most good libraries.

But far more important than all the reading one can do, is the actual experience of using color. Any single color combined with white, which makes up so much of the handweaving one sees, presents no color problem at all, and is easy to do. And to my mind, one reason why so much handweaving lacks any individuality or interest.

A large field of opportunity is open to the handweaver who will take the time to study and experiment with colors, to design and create individual fabrics. Many people have an inborn feeling for color, and see it and use it easily in a creative way, are real artists. But everyone loves color, and through study can learn to play with it and use it, in the same way they learn to play a musical instrument. Perhaps they will use it with somewhat less skill than the artist, but they can use it effectively and well, if they understand certain of its principles and laws, and gain great joy through its use as well.

Now for some interesting ways to get color practise. One very simple thing to do, is to get a package of as many different colors of Kindergarten papers as possible. These are put up by the Milton Bradley Co. of Springfield, Mass in an excellent assortment of colors. Make a color circle putting in the colors in their proper places. Then make abstract designs with different colors cut in large and small shapes, and arrange on a colored background paper. It is so easy to select your colors, to cut them to any size you desire, and arrange them into a design, that this method is a very easy one to use to work out designs for "Laid-in" technique to weave. Select a group of these colored papers, and try making some free abstract forms, you will be surprised with the results. Colored crayons also offer a good medium, and can be purchased in sets of 60 or more colors, but of course the palette is more set than with paints. Inexpensive water colors, such as the Devco Tempera colors may be purchased in 2 oz jars at 50¢ each, and offer an excellent medium for anyone who really wants to play creatively with color, and are much less expensive than the regular water colors. To overcome a fear of color, which many people have, try taking very large sheets, the larger the better, and cover these with large spots of different colors. Be just as free as possible. Do not try for any definite shape or form. Take any color that your fancy dictates, and use a very large brush. In this way you get a feeling of color, and become sensitive to color relationships. Next take several objects, and try to get their colors. Do not try for the form of the object itself just its color. Make a collection of nature's colors found in plants butterflies, moths, flowers, trees etc. For instance, take a blue batchelder button, and carefully match up all of its colors, either with the colored paper or with paints. You will get lovely shades of blue green in the stem, and shades of blue and blue violet in the flower. Recently I have taken a parrot tulip, its colors ran through a gorgeous array of red and yellow and green. A study of the proportions of the different colors is also of much interest in these natural objects. See the proportion of bright color to the dull or neutral. Observe how the different colors effect each other when used together. Note the combination of several colors in most of these natural objects, to give the effect of one color.

This winter, one of the outstanding Art Exhibits which I saw here in the city, was one at a show of "Art in the Automobile", in which a collection of natural objects were shown in connection with a group of samples of upholstery materials. A lovely piece of rose beige was developed from a bit of coral, a beautiful neutral silver blue green sample from the colors of a butterfly's wing; a soft green sample with a tiny line of red in it from a gorgeous green bird with a brilliant red breast. Surely here is food for thought for those of us who weave. If the automobile manufacturer is doing that for our cars in which we ride, we can at least begin to do it very seriously for the things we can make on our own looms.

Now I wish to suggest some definite color problems, which I hope you will try in any of the mediums suggested above, or with yarns on your loom. These may give you some exciting surprises or dismal disappointing failures, according to your own ability in choosing the correct values and proper proportions, but which ever it is, they will give you much information.

1. Equalization of Color.

For this problem, use a light color, a dark color, a dull color, and a bright color, with either gray or black. Use these in such proportion that when you half close your eyes, no one color stands out more than another. Note the smaller proportion of bright color which you can use, with relation to the others.

2. Colors in a Sequence.

Colors below the line signify the background color. In weaving, use the color below the line for the warp. Or if you have a white warp on the loom, use it for the tabby thread. Or use the yellow for both warp and tabby. Do not forget that a gold or tan warp is a value of yellow. Use the colors above the line for the pattern weft.

(A) $\frac{OY \ Y \ YG}{Y}$ (B) $\frac{O \ OY \ YG \ G}{Y}$ (C) $\frac{O \ Y \ G}{Y}$ (D) $\frac{R \ RO \ O \ OY}{Y}$ NS Johnson
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2. Colors in a sequence (continued)

(3) RO O OY YG G GB
Y(F) YG G GB B
Y(G) YG G GB B BV V
Y

3. Color in the Triads.

To get the triads, start with yellow, count 5 and get red, count 5 and get blue. This is the most common triad of colors, and the one from which all the other colors are derived. Other triads are orange, green, and violet. Then Blue green, red violet, and orange yellow. Another Yellow green, blue violet, and red orange, etc. Take any of these triads and use one value of one color for the background color, with the other three colors for the pattern weft.

4. Contrasting Compliments.

To get contrasting compliments, take the adjacent colors to the color with which you start. Start with yellow, its contrasting compliments are RV and BV. Start with red, its contrasting compliments are YG and BG. Blue has for its contrasting compliments RO and OY, etc. Try using some of these combinations, with the warp or tabby in a value of one of the colors, and use the other three colors for the pattern weft. You will find from this, that the addition of a common tone to all the colors of any combination relates the hues more closely, and this is a simple method to harmonize the hues of a group.

5. Try weaving a free hand design in "laid-in" technique using great freedom in the design, and just as many colors as you wish, the more the better, for the laid in thread. For the tabby back of the colored threads use fine black thread. Make as much variation in the sizes of the spots of color as possible to add interest.

6. Try using very bright colors for tabby back of any pattern you may have on your loom. Use only one pattern color. Note the sparkle and life of your weaving when the bright color is used for the tabby.

7. Take a group of inharmonious colors. Study them to see,-

(1.) How the hues may be more pleasantly related

(A) By slightly veiling all the colors by weaving them with a warp of some one tone, or tabby of one tone to influence them all. Or by weaving in touches of one tone here and there among the colors. If the contrast of the colors in the group is too great, the overlay color may make the whole too much of one color and so monotonous.

(B) Analyse the colors to see if they are compliments or near compliments.

If so, modify all the hues by making them more neutral so they do not compete with the compliments. Or make them adjacent to one or the other of the two compliments.

(2) Are the colors in a sequence.

(A) If so, subordinate all the hues to the central one, and make all more neutral.

(3) Study the combination and see if they are in the general range of one of the triads. If so, make this relationship more definite to bring them into harmony.

8. Analysis of color in nature for use in weaving.

Select a flower and make notes of all the colors you can find in this, either with yarns or with water colors. Work out a color scheme for weaving from this.

No threading is given this month, but I hope that everyone who receives this letter will try just as many of these suggestions as they can. They are well worth the time and effort you put into them. And much may be learned, no matter whether you are an experienced weaver or not. Use some of these color combinations with any pattern you have on the loom. A color sampler will be very suggestive, and as color is the main object, the kind of yarn used should be that which suits the color best.

Have you enjoyed this color "spree" ? Has it opened up a new field for you ? I hope so. Are you afraid of color ? Start on some of these problems with confidence and joy. Create to your heart's content. Use color and get the wealth of vibration and happiness it can bring you. And if at first, you are not satisfied with the results, do not be discouraged. If your colors are not right, there is a reason why they are not pleasing. And you can find it, and in that finding gain much. I have a good many effective color combinations which I could pass on to you, and many of these are in my traveling Exhibits. But I do feel that every weaver should experience color for themselves. Also you will find as you work, that different pattern drafts give different color effects, even if exactly the same colors are used in one pattern as in another.

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Most sincerely yours,


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