SECRET OF THE WONDERFUL COLOR COMBINATIONS USED BY THE ORIENTALS AND BY PRIMITIVE PEOPLES

THE question is sometimes raised as to whether or not civilization is as destructive of the natural sense of color as it is of sight, hearing, smell and the other natural senses. When we study the color combinations of primitive peoples, we are apt to think that this is so, and it is only when we turn to the wonderful use of color by races of far older and higher civilization than our own that we realize that it is not civilization in itself, but our kind of civilization, that destroys the power of pure perception and unerring combination of color.

That this should be so is in line with the other defects of our crude western civilization. We have lost the power of discerning the most subtly harmonious color combinations because we are always seeking for obvious and striking effects that are

quickly and easily obtained. This is partly because we do not see rightly and partly because in this age of swift action we do not stop to analyze the relation of colors to one another and to their surroundings. We are given to using color in an intentional way rather than as something that is inevitably a part of the whole scheme of things. We may like a certain color and so we put it into the furnishings of a room,-not because it is the color that naturally belongs there, but because it is something that is interesting to us and so we put it there. Therefore, with our dulled color-perception, we make some astonishing blunders, and, with all the pure and brilliant colors that modern science has placed at our command, we fail to obtain as brilliant and beautiful results from their combination as we find either in the work

SECRET OF ORIENTAL COLOR HARMONIES

of the Oriental craftsmen, or of primitive peoples like the South Sea Islanders or our own American Indians. There is no question about the harm that we do to the work of primitive people when we replace their native dyestuffs by our own modern dyes; and we know equally well how impossible it is to copy the dull rich colors of Oriental rugs in such a way as to produce the same effects. They are as close copies as we can make, but something is lacking in the colors themselves.

Perhaps something of our defective color-perception is the result, as well as the cause, of our method of producing color, as contrasted with the more natural methods of Eastern or semi-civilized peoples. A long and painstaking investigation of this point shows some startling results. The question which started the investigation was the brilliancy of the hues used in some of the Oriental work. This led to a comparison of the most glowing of these colors with those produced by our modern dyestuffs, and the first surprise came with the discovery that the Oriental colors were dull beyond belief. A yellow that seemed fairly to blaze when associated with the other colors around it, turned out, when isolated, to be a dull soft straw-color. The blue which appeared so brilliant was no brighter than the shade of an old-fashioned blue stocking and the reds and greens were equally soft and dull. method used to isolate these colors was to cover a fine old Japanese print, that was chosen as the subject of the investigation, with a card. Then a small hole was cut in the card, in such a position as to show only a portion of one color. When the color was thus isolated from its surroundings it was matched exactly by combining the colors from the regular painters' tubes.

After a long series of trials, sets of cards were made which perfectly matched the Oriental colors, but this was accomplished only after it had been discovered

that no match was possible except when each color contained all three of the primary colors. The blue was found to contain both red and yellow; the yellow, although apparently pure, contained red and blue in no small quantities, and the red had a considerable proportion of blue and yellow. The purple, although the brightest color used, had in it an appreciable quantity of yellow.

Another peculiarity of the colors so obtained was that the cards on which the matching tints were painted were absolutely harmonious, producing brilliant Oriental combinations no matter how they were shuffled. As the different colors came together they accommodated themselves to one another with visible changes in tint, not one color clashing with any other, nor was it possible, by any combination, to produce a discordant note. The fact that each color contained all three primaries gave to them all the effect of mutually reacting on one another in the direction of harmonious combinations.

The primitive and old Oriental dyes and paints all seem to have had this peculiar composition. As each primary color contained the other two, the dyes were not pure color like our modern dyes, and as a consequence they had in them something in the harmony seen in nature and in natural things. These statements may easily be proven by matching, with water colors, the colors of an old-fashioned Japanese fan or a fine old Oriental rug, an experiment that could not fail to be both interesting and valuable to the student of color. When we learn enough to prepare lowtoned colors in this way, rich and brilliant color combinations will be possible as well as the duller, softer harmonies which we find so restful. It may be possible also that when we take the time to do this we will reap as a result a much keener and purer perception of color.