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INTERSOCIETY COLOR COUNCIL NEWS LETTER NO. 103

NOVEMBER, 1952

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NEW INDIVIDUAL MEMBERS We welcome the following four individuals, who have recently been approved for membership in the Inter-Society Color Council by letter bellot:

Allen Stimson, 40 Federal Street, Lynn, Massachusetts. Particular interest: Color of daylight illuminants and their effects on color photography. Member of Optical Society of America, Society of Motion Picture and Television Engineers, and Photographic Society of America.

Omar Marcus, Tri Art Color Corporation, 245 East 55th Street, New York 19, N. Y. Particular interest: Rendition of colors and colored materials on Eastman Kodak Negative and Positive Films; color appreciation, the psychological and psychophysical effect of colors.

Lever Brothers Company, Research & Development Division, Att: Dr. Seymour Goldwasser, 164 Broadway, Cambridge, Massachusetts. Particular interest: Color problems associated with the manufacture of soap, textiles, powders, cosmetics.

<u>Paul F. Flamm</u>, Tennessee Eastman Company, Kingsport, Tennessee. Particular interest: Measurement and specification of color, chiefly of Chromspun Acetate yarns both staple and continuous filament. Member of American Society for Testing Materials.

CALIFORNIA COLOR SOCIETY On October 23rd, this active society met at the Art Center School Auditorium, 5353 West 3rd Street, Los Angeles, its usual meeting place. The speaker of the evening was Ralph M. Evans, who delivered the Drehm Memorial Lecture of the Rochester Institute of

Technology for 1951, the subject being "Creative Direction in Color Photography." Mr. Evans is well known to all color workers, for his many interesting lectures. He is the author of "An Introduction to Color" and a past chairman of the ISCC.

PHILADELPHIA-WILMINGTON GROUP and DR. JUDD'S ADDRESS

On the evening of October 24, this affiliated color color group of the ISCC joined with the Philadelphia Section of the AATCC to co-sponsor a meeting addressed

by our past chairman, Dr. Deane B. Judd. The meeting was held at the Penn Sheraton Hotel, 39th and Chestnut Streets, Philadelphia. The subject of the address was "Color Formulation, Color Measurement and Color Blindness."

Dr. Judd is known to all color workers throughout the world as an authority on each of the three aspects of color embraced in the title of the address. He is the author of "Color in Business, Science and Industry," published in 1952, as well as a hundred-odd scientific and technical papers on color and allied subjects. He draws examples from his over twenty years of experience at the National Bureau of Standards. A chapter on subjects closely related to colorant formulation was an important one in his book; and was of great interest to members of the AATCC, who deal with dyes, and to the Philadelphia-Wilmington Group, many of whom deal with pigment formulation. Dr. Judd received the Exceptional Service Award, Gold Medal, from the U. S. Department of Commerce for outstanding accomplishment in colorimetry and color vision; and the 1936 Journal Award from the Society of Motion Picture Engineers for a paper on color blindness.

The meeting was preceded by dinner in the hotel's Main Ballroom. Mr. Constantin J. Monego, Chairman, Philadelphia-Wilmington Color Group, presided at the meeting.

COLOUR COUNCIL OF TORONTO This newly affiliated color group held a dinner meeting on October 6th in the Pine Room, Scott's Restaurant, 11 Bloor St. West, Toronto. The speaker of the evening was E.

Victor Grainger, of Grainger Florists, who spoke on "Color in Flower Arrangements."
Mr. Grainger is a regular lecturer to several classes of horticultural groups. He demonstrated the theme of his lecture with flowers, making a presentation especially interesting to students of color harmony. Assuming this subject of special interest, the meeting notice invited members to bring "their wives and/or sweethearts."

The Toronto Council was scheduled to meet on Monday, November 3rd for a dinner meeting, also at Scott's Restaurant. The speaker of the evening was to be the Toronto Council's Chairman, Charles R. Conquergood, of the Canada Printing Ink Co., Ltd., who is the ISCC vice-chairman. The subject announced was "The Work of the British Colour Council," dealing with the history, organization and function of this British council. Miss Hilary Titcomb was to assist, and Mr. R. C. Allison to preside.

WASHINGTON-BALTIMORE COLORISTS Expressiveness of Color was the title of an address by ISCC Secretary Ralph M. Evans given on November 5 as chief item of a color meeting at Pepco Auditorium, 10th and E Streets, N. W. Washington. The meeting was jointly sponsored by the

N. W. Washington. The meeting was jointly sponsored by the Illuminating Engineering Society, Capital Section, and the Washington and Baltimore Colorists. The topic embraces what Mr. Evans, in the lecture prepared for the 1952 annual meeting of the ISCC, indicated as the essential idea of his development of the rules of harmony. Evans is so well known from his ISCC work, his work with Eastman Kodak Co., and his very numerous and excellent lectures, that we shall add here only that his lecture was very well received by the local groups in Washington, and that the occasion was used to publicize at a local level the ISCC and its member bodies.

Mr. Evans appeared as secretary of the ISCC, in fact, as the meeting notice stated, the local groups were able to get him as a speaker because as far as it was possible all local chapters of the ISCC Member Bodies were invited to attend the meeting.

Our ISCC Chairman, Dr. E. I. Stearns, sent a special message some months ago to the secretaries of all Member Bodies inviting them to participate through their local Washington membership, particularly if they had a chapter in Washington.

The Capital Section of the Illuminating Engineering Society co-sponsored the meeting with the local Colorists. The local A.I.A. chapter sent notices to all its members, Dr. Walter Scott of the AATCC delegates mailed notices to local AATCC members, Dr. Deane B. Judd as chairman of the OSA delegates did the same for local OSA members. Dr. Stearns was present at the meeting and spoke for a few minutes at the beginning of the meeting. He described the ISCC organization, its aims and purposes, and its desire to cooperate in trying to reach and serve at a local level the diverse interests of the ISCC Member Bodies. It seems as if local meetings of this sort, spearheaded by the local color organizations, could do much to reach locally the wide memberships of our Member Bodies, help to stimulate and coordinate their color interests, and make them more aware of their own association's part in the ISCC. This is the first meeting of this sort, and for the ISCC we hope others may be planned that will stimulate color interests and a local awareness of the ISCC as an organization through which its Member Bodies may function cooperatively on matters of color interest, whether at a local or national level. Other speakers might be approached on the same basis.

Two of four brief notes from our frequent and witty con-BRIDAL BLACK tributor, Helen D. Taylor, Color Consultant: The first, BLUE ON RED cartoon of a couple in a church wedding, the bride dressed in black. Legend spoken by women nearby: "She's a nurse - she's sick of white."

The second, UP report from Paris. The French government is framing new legislation and taking new drastic measures to bar Red communists from government and defense establishments. Police have been ordered to spray participants in any future demonstrations with a penetrating blue dye impossible to wash off, thus identifying supposed Red agitators and hoodlums.

H.D.T.

OUR MENTION MENTIONED

In a recent letter received by our Secretary and the editors, the Verlag für angewandte Wissenschaften refers to our remarks on the new journal published by this organization under the chief editorship of Dr. - Ing. habil Manfred Richter. The new journal was titled simply "Color." The reference was to ISCC News Letter No. 101 (July, 1952), p. 4-5.

BACKER TO TEACH

The former Captain Stanley Backer, well known to many color IN LONDON workers because of his fine work for the army in color control and other research at the Philadelphia Quartermaster

Depot, has entered a new field. A letter dated September 12, states that he and Mrs. (Esther) Backer are in England for the 1953 school year. He will be teaching at Imperial College in London. For his many friends, who will wish to join us in wishing him all success, we add that his home address is 14 Mayfield Road, London S.W. 19, England.

DAUGHTER OF OSTWALD COLOR INTEREST

The following letter to Dr. Fischer and brief remarks by our past Chairman, I. A. Balinkin, were received through the courtesy of these two gentlemen. While the 21st Annual Meeting of the ISCC is past history, it brought recently a

letter from Fräulein Grete Ostwald (Haus Energie, 10b Grossbothem i. Saxony, Germany). She is the daughter of the late Wilhelm Ostwald - a name well known in color circles or, should we say, color spaces.

Dr. Martin Fischer
University of Cincinnati
Cincinnati 21, Ohio

September 3, 1952

Dear Doctor Fischer,

Finally West Germany has founded a periodical, "Die Farbe" wherein is notice of a meeting in New York of the Inter-Society Color Council in February whereat a paper was read: "Artists and Their Pigments". The author is named M. Fischer. Is that you? And if so, could I have the paper? At this meeting there was presented also: "Abstract Color Films". I am very curious to hear about them. But I hate to bother you in any way and beg you earnestly not to take up the affair if you are not the man!

We had no good summer, heat and cold alternating and reaching unusual degrees. The tomatoes just begin to ripen and probably won't ripen at all. What hasn't happened in these years of hunger? Vegetables are scarce. But bread is good and enough! Fruits are also scarce because of many frosts.

Signed: Grete Ostwald

Dr. Fischer knew Professor Ostwald and his family well, having spent one summer as their guest. For a number of years there was a frequent exchange of letters. As the passage of time throws a heavy screen over our remembrances — a letter can bring back the tie between the living and the eternal future.

I. A. Balinkin

TRICK COLOR SCHEMES From Mrs. Blanche R. Bellamy, Manager of Munsell Color Company and Secretary of the Munsell Color Foundation, we received the following item, which she thought amusing, taken from the Baltimore Sun of September 10. It was headed Trick Color

Schemes for "Projects," and came from the Quarterly Review, a publication of the Housing Authority of Baltimore. The title there was "Pigment Planning Perfects Project Painting Procedure." The HAB has decided to substitute "sprightlier and more varied (color) combinations" for window sashes and doors. In their projects the "unimaginative gray and green are to go." The artist is called on for a minimum of seven or eight color combinations. Selecting these "is by no means a standardized procedure." And that "accounts for the subdued air of anticipation that has been running through Perkins Homes ever since the color specialist arrived in her multicolored artist's smock" (Italics ours). There are no stock colors; all paints are blended. For the project discussed, eight combinations were used: light blue and dark blue, gray and maroon, ivory and gray green, ivory and maroon, gray and dark blue, light green and maroon, gray and blue green, light blue and maroon.

Note the use of maroon four times, gray three. The ivory and blue window sashes are said to be universally popular; and "everybody agrees that the new paint scheme adds tremendously to the appearance of the project."

PASSING OF Through a card from Alexander E. O. Munsell, we obtained further news about the sad passing of his wife Louise, known to many ISCC friends as a woman of talent, dynamic personality and courage. She died on August 11, 1952, at the age of 45. She had been a source of

inspiration to Mr. Munsell in his color work and other activities, as well as to all others with whom she came in contact. As Munsell said in a note transmitting her picture, and her signature with two characteristic doodles, our memory of her can strengthen us in doing our share in developing our talents and in bringing nearer a better world. This we feel sure, is the best expression of their sympathy which his many friends can bring to Mr. Munsell.

HUNTER
ASSOCIATES
LABORATORY

The following notice, dated November 1, has been received.

Richard S. Hunter, formerly Chief Optical Engineer with the Henry A. Gardner Laboratory of Bethesda, Md. announces the

formation of a new development, testing and consulting group devoted exclusively to appearance and related optical properties of materials. By appearance properties are meant color, diffuse reflectance, gloss or luster, turbidity, haze, opacity and the like.

This new laboratory, the first of its kind, will be called the Hunter Associates Laboratory and will be located at 5421 Brier Ridge Road, Falls Church, Va. Mr. Hunter, who is designer of the reflectometer, color-difference meter, and the several glossmeters and other instruments which bear his name, will have as his associates Mr. Marshall Powell, an electronic engineer formerly with the Gardner Laboratory, and Mr. J. D. Ferguson, Jr., a mechanical engineer.

A small optical laboratory is being equipped at the above address in suburban Washington, D. C. By January 1, research and manufacturing organizations concerned with product appearance will be offered the following types of services:

- 1. Advice on appearance instrumentation and preparation of specifications (no charge for suggestions or estimates).
- 2. Tests of materials for regular and special appearance properties, including calibrations of standards and referee tests.
- 3. Designs of improved appearance-testing instruments (It is not planned to manufacture instruments, therefore suitable designs will be licensed for manufacture by others).
- 4. Development of procedures (including equipment where necessary) for testing, inspecting, and in some cases automatically controlling the appearance quality of manufactured and processed materials.

Information about the facilities of the new laboratory and fees for its test and development work may be had by writing Mr. Hunter at the above address.

CENTER OF COLOR INFORMATION Through the courtesy of our retiring Secretary and the present Secretary we received copy (in French) of the proceedings of the third meeting of the General Assembly of the

Color Information Center of the French Standardization Association held on May 21, 1952, at 2 Place de la Bourse, Paris 2. The meeting was presided over by Professor Fleury, Director of the Institute of Optics, the Secretary being M. Lutier. Previous meetings on May 25, 1950 and June 14, 1951 were referred to by Professor Fleury. The agenda included report of the activity of the Administrative Secretariat of the Center since last meeting; eventual transformation of the CIC as governed by the law of July 1, 1901, and examination of the statutes concerned;

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final participation of the CIC in various manifestations: Cycle of conferences at the Center for improvement of technique, participation at expositions, etc., and diverse other questions.

The complete report is too long to review here in detail. If anyone wishes further information, we suggest that he contact our Secretary, Ralph M. Evans, Color Control Dept., Bldg. 65, Eastman Kodak Co., Rochester 4, N. Y., to whom we will return the report within a short time after appearance of this News Letter. Much of the detail referred to included study and discussion of the articles of organization in the charter of the association.

RIGHT ROAD. A new use for color was described in an editorial sent to us WRONG DIRECTION on September 3, 1952, by Prof. I. A. Balinkin, former ISCC chairman. It is a common experience to find oneself "speeding merrily along the proper highway - but in the wrong direction." And who hasn't. Experiments have been conducted in Washington using blue, green, yellow and red to indicate the four respective cardinal directions, northward, eastward, southward and westward. The colors of course would compliment the usual route numbers and

ITEMS

GARDNER Leaflets describing seven new items for the paint and color trade were released in October by Henry A. Gardner Laboratory, 4723 Elm Street, Bethesda 14, Md. These include data

on a gloss measuring unit, different-angle gloss heads to connect to the photometric unit, a Becker pressure type spray gun, variable impact tester, Pfund cryptometers (for quick hiding-power measurement), fineness and grind gages, and a variable impact tester. Further information on these items may be obtained by writing to the Gardner Laboratory at the above address.

REFLECTANCE OF SNOW

The latest of the long series of research papers by W. E. K. Middleton and his associates of the National Research Council, Ottawa, Canada, this time with A. G. Mungall, deals

with the luminous directional reflectance of snow (J. Opt. Soc. Amer. 42, 572-9; Aug., 1952). Measurements were taken with a new goniophotometer. All samples showed some specular reflection, at high angles of incidence; but at angles less than 450, diffuse reflection accounts for nearly all the luminance of the snow surface. The appropriate theory was developed, and snow surfaces were grouped into the various estagories found in the Ottawa region.

THE WOOD'S COLOR APTITUDE

For many years the term Color Aptitude Test has meant to ISCC members the test under development by the Dimmick-Foss subcommittee on ISCC Problem No. 10, the latest edition of which will be released soon under sponsorship of the Federa-

tion of Paint and Varnish Production Clubs. When released it will be fully reviewed in the News Letter.

Meanwhile another test, also called Color Aptitude Test, has been completed after many years spent in its development by another ISCC member, Walter A. Woods. Mr. Woods is a teacher of psychology, formerly at the Barmore School in New York, now with the School of Olivical and Applied Psychology, Richmond Professional Institute, College of William and Mary (where he gives, by the way, a 3-credit course on Color and Personality, Psych 319E).

Mr. Woods discussed his test several years ago with the writer who was then ISCC

secretary. He has developed it for testing student's aptitude, to judge whether they should be advised to go into work involving use of color. The test is hand produced, and production has therefore been slow. It is distributed by C. H. Stoelting and Company of Chicago, and retails for about thirty dollars. With the test there is a Manual of Instructions and Norms, copyright 1952 by the Industrial Psychology Laboratory, Box 318, Sparta, N. J.

The test is intended to measure ability to work with colors on the basis of past experience and an ability to distinguish colors. An important assumption is that past experience will be used by the subject in the test situation to provide a basis for color comparison and as a basis for memory cues. The Manual states that the test "assumes that color aptitude is related to color experience." The test has been standardized under north daylight (clear and cloudy, but not overcast days) and under a Macbeth Easel Lamp, with results found to be similar.

There are two sets of 28 plates, a stimulus set containing one color or color combination on each page and a response set which contains four sets numbered 1 to 4, from which the observer makes a choice of the item "identical in color." Any one, or none, of the items on the response plate may be identical in color to the stimulus plate. Each stimulus plate is presented to the subject for six seconds. The plate is then removed and the response plate presented after four seconds. While the response plate may be left before the subject as long as he desires in order to select the item "identical in color" to the stimulus plate he had just seen, experience demonstrates - according to the Manual - that subjects requiring more than 8 seconds do not do well.

The scoring is rapid and simple, the total number of correct answers out of 25 (3 of the 28 are instruction plates) is the score. A table of percentile distribution of scores by six groups of observers is included. The median score for advanced art and professional color groups is 17. It is stated that no top level designer of professional colorist tested scored under 18, and no color matcher or lithographer under 19.

Certainly the test measures color memory involving accurate identification from choices that are usually in the same general family of colors. Just what else it measures is not entirely clear, although a comparison of scores of the different groups used for testing validity shows art students and professional colorists with better scores than those in non-color occupations.

Because of the way the color strips are mounted there is a good deal of rubbing that makes them quite perishable. The test would not stand hard use, although even a certain amount of rubbing may not interfere too much with the correct choice of color.

For those who are interested we suggest that they write directly to Mr. Woods at 901 West Franklin Street, Richmond 20, Virginia.

D.N.

DRAMATONE

Dear Editor: Some time ago I had to set up color specifications for painting my apartment. Nothing fancy was involved, yet I soon found that my painter - who said "ch, yes" he could match anything I wanted - was not at all successful, nor would he use anything but the particular brand of paint he was used to. In fact, when he found I was in the color business he bowed out, evidently expecting that he could expect trouble. So

I had to find some simple way of working with the painter. With the next one I started by asking what brand of paint he intended using. It was Spred Satin, a Glidden paint. So in order to make sure that I got what I wanted with a minimum of painter-trouble I went to a local store where this paint was sold. There I found such a practical method of selection that I was able to find a color very close to each that I had in mind, and I came away with such simple paint specifications for each color that the painter had no trouble at all. In fact he was most pleased that I knew so clearly what I wanted. The result, in all cases but one, was exactly what was intended, and in that case I let the painter persuade me to alter my original specification.

The next time I had occasion to write Mr. Smedley, Glidden's director of color research, I told him how practical I found his color charts for Spred Satin paints. His reply was of such interest that I have prepared this News Letter item so that others may share it with me. First, perhaps I should say that the entire sales system for this paint consists of a giant color card, a combination color selector, and a small color deck. Each dealer is supplied with the giant card, and usually has the other cards as well. Individuals who wish to purchase the materials can do so, the color card at \$3.50, the small deck at \$2.50, and the large selector at \$10.00, with special prices to architects and dealers. The letter follows:

"In your letter to me of August 14 you mentioned you had used our Spred Satin in your new apartment. We are very pleased to know this.

"I know you will appreciate the time and effort that has gone into producing this Dramatone Color System, as we have named it. As you know, there are many paint mixing systems in existence. Ours was a special problem, because, first, we sell millions of gallons of this material. Most people who purchase it apply it themselves. Because the trend in color has been toward those of lower values and stronger chromas, many customers are desirous of obtaining these so-called high fashion colors. However, they definitely want to be able to get this particular quality because it is more foolproof and about the same price as our standard pastel line. Second, we have learned from experience that complicated intermixes will not sell, and the average home owner is a little reluctant to mix them unless he can do so simply. Therefore, our problem was to produce the desired strong chroma colors in the same quality as our standard Spred Satin pastel line so that when intermixed, the customer would have the same product, ready to use. For merchandising reasons, it was necessary that we limit the number of these basic colors to as few as possible, but at the same time, we had to have a sufficient number to enable us to obtain all the desired colors by intermixing simple proportions.

"Furthermore, in addition to this, we wanted the mixes to come out to standard size quantities as used in the paint business - gallons, half-gallons, and quarts. By putting up these eight basic colors, which is the number we finally arrived at, in gallons, quarts, pints, and half-pints, we were able to produce many of the good intermix colors so that they could be purchased in quantities that will total gallons, half-gallons and quarts. However, when the intermixes are in our standard pastel line, we were limited to intermix portions of gallons. However, some half-gallons can be made when equal part mixes are indicated.

"The small color deck and large color selector show the same color arrangement. The standard packaged colors have been placed in the front of both decks to simplify finding them. However, on the giant color card the standard packaged colors have been placed where they fit in the spectrum arrangement. You will note the

large selector and color decks are split, so any two colors can be seen in combination. In the color selector, the large portion of the sheet is perforated. If a color chip is needed for reference by the customer when shopping, the dealer or salesman can furnish one quickly. This helps cut down color card costs. The smaller or unperforated section is permanent, and the formulas or proportions necessary to make a particular color are printed on the back. Replacement sheets are available when needed. However, both the perforated and unperforated sections are replaced at the same time to eliminate any possibility of differences that may occur due to handling and exposure. These extra or replacement sheets are carried in files by the salesman, or may be obtained from stocks at various division points.

"You will note the colors are named for sales reasons, and are quite appropriate in most cases. However, I might add that this is becoming one of our big problems. A year ago we produced a line of 60 colors, and now this one with 180 for which names had to be supplied. In addition to this, we have to come up with color names for our other standard paint lines besides hundreds of automobile color names.

"On the right of the giant color card is a Color Harmony chart which lists all the colors as they appear on the card. Under each we show colors in the various tone groups that can be used with that particular color. We selected a range of different values and chromas that could be used as a guide for home furnishing colors such as furniture, draperies, carpet, etc., as well as wall combinations where more than one color is desired.

"Below the Color Harmony chart is the Mixing Guide which shows the proportions used to get the various colors. These proportions are either 1 to 1, 3 to 1, or 2,1 and 1. There are a few which show one pint of a base color added to a gallon of a standard pastel color to increase the chroma slightly.

"We would certainly appreciate having your personal comment on this program. I might add that it has proved quite successful so far. The high fashion type colors, or deep tones, will never sell to the mass market in the quantities that the pastels do, but the product is so outstanding and so simple to apply that there is increasing demand for a wider range. We feel this system has done the job for us."

This letter was signed by C. R. Smedly, director of color research for the Glidden Co., and as you know, an individual member of the ISCC from "way back!" We have described many other of the unusual or better known of the paint mixing systems and I believe this should be added to them.

D.N.

RED, WHITE The harmonious combination of hues and white found in the American, AND BLUE French and other flags, and predominant in many renaissance paintings, is a very old one. Among thousands of articles from various sources which mention this combination may be mentioned a brief recent one which is interesting also in relation to the history of painting. It is "Syrians as Pictured in the Paintings of the Theban Tombs," by J. B. Pritchard in Bull. Amer. Schools of Oriental Res. No. 122 (April, 1951). The paintings referred to are on the walls of Egyptian New Kingdom tombs at Thebes, extending through a range of roughly 150 years in the period 1500-1000 B.C. They are our chief source for our knowledge of the appearance and costume colors of the inhabitants of the Upper Euphrates region, Syria and Palestine in this period.

Many of the paintings of the tombs have been reproduced in outline or in color in the publications of the Metropolitan Museum of Art and other references given in the above-mentioned article. The majority of the scenes in which Asiatics are portrayed have as subject the tribute brought by foreigners to Egypt. Foreign captives are also represented. Labels are often attached to the figures and sometimes to the products represented. On three of the four definite garment types which are portrayed and described, the chromatic colors of our heading are mentioned. The first type is a simple, kiltlike garment which extends from the waist to the knees, with borders usually decorated with red and blue. The second type is a long and long-sleeved garment which extends almost to the ankles. This white dress is also usually "gaily decorated with blue and red" along the edges and with a broad line running down the front of the garment. A third and later type is a more elaborate costume, with the skirt wrapped around several times with a long, narrow piece of cloth decorated along the selvage, in some cases with six or seven folds. The decoration along the border is blue and red in varying combinations.

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