Inter-Society Color Council *Newsletter*

NUMBER 195
July - August 1968

FIRST CONGRESS OF THE INTERNATIONAL COLO(U)R ASSOCIATION (AIC)

Accompanying this issue of the N. L. is the announcement for the First Congress of the International Colo(u)r Association, to be held at the Royal Institute of Technology, Stockholm, Sweden, June 9-13, 1969.

Note that the announcement contains a preliminary registration form which should be returned not later than October 31, 1968. Further information will be circulated only to those having sent in the preliminary form.

As indicated by the list of "Topics of the Congress", this momentous meeting promises a rich and comprehensive program for those lucky enough to be able to attend.

NEW MEMBER-BODIES

As announced at the recent Annual Meeting and in N. L. #193, two new Member-Bodies, the American Society of Photogrammetry and the Institute of Food Technologists, have joined the ISCC. Both of these groups engage in very interesting work and information about them is provided here for the benefit of those readers who are not already conversant with the groups' activities.

American Society of Photogrammetry

Founded in 1934, this group now has nearly 5,000 members, a staff of seven, and fifteen regional groups. Its membership is drawn from individuals, firms, and government agencies engaged in photographic mapping or other applications of photographic science in aerospace, agriculture, archeology, architecture, dentistry, engineering, forestry, geology, medicine, oceanography, tailoring, and urban planning. More than 80 commercial companies are sustaining members of the Society.

Current technical program areas are: abstracts and bibliographies, aerial photography, color photography, computational photography, education, liaison, library and history, nomenclature, photogrammetry for highways, remote sensing and interpretation, research, surveys and mapping.

The Society publishes Photogrammetric Engineering, a monthly journal; Manual of Photogrammetry, third edition, in two volumes; Manual of Photographic Interpretation; and the recent Manual of Color Aerial Photography.

The Executive Director of ASP is Brigadier General Lawrence P. Jacobs, with headquarters at 105 N. Virginia Avenue, Falls Church, Va. 22046. Delegates to the ISCC are:

Mr. John T. Smith, Chairman
Environmental Science Services Adm.
Coast and Geodetic Survey
Rockville, Maryland 20852

Mr. Abraham Anson, Voting Delegate
U.S. Army Engineer Topographic Laboratories
Geographic Sciences Division
Fort Belvoir, Virginia 22060

Mr. Allan L. Sorem, Voting Delegate
Eastman Kodak Company
PCI Markets Division
343 State Street
Rochester, N.Y. 14650

Mr. Serenus W. Dossi
10122 Ashburton Lane
Bethesda, Maryland 20034

Mr. Roland Dunker
Air Force Avionics Laboratory AVRP
Wright-Patterson Air Force Base
Dayton, Ohio 45433

Mrs. Clarice Norton
Fairchild Camera & Instrument Corp.
300 Robbins Lane
Syosset, L.I., New York 11791

Mr. John S. Odell
Army Map Service
6500 Brooks Lane
Washington, D.C. 20315

Mr. Kenneth Reynolds
Wild Cameras
465 Smith Street
Farmingdale, N.Y. 11735

Dr. Harold Rib
Bureau of Public Works
Washington, D.C. 20252

Mr. Robert Spriggs
Wright-Patterson Air Force Base
Dayton, Ohio 45433

The Annual Convention and Exhibition of ASP, held jointly with the American Congress on Surveying and Mapping in Washington, D.C., in March, is the largest meeting of its type held anywhere in the world. The next meeting of the Society will be the Semi-annual Meeting in Texas from Sept. 29 to Oct. 3, 1968.

Institute of Food Technologists

Founded in 1939, the Institute now has over 9,500 members, a staff of fifteen, and some forty regional sections. It is a professional society of technical personnel engaged in production, product development, research, and product control in food industries. Its objectives are: to promote the application of science and engineering to the production, processing, packaging, distribution, preparation, and utilization of foods; and to aid educational institutions in developing curricula for training in this area.

The group has special committees on citrus products, food additives, quality control of food products, and taste testing. Its regular publications are: Food Technology (monthly), Journal of Food Science (bimonthly), and Membership Directory (annual).

Institute headquarters are at 221 N. LaSalle Street, Chicago, Ill. 60601. Calvert L. Willey is the Executive Director. Delegates to the ISCC are:

Dr. Gordon Mackinney, Chairman
University of California
Dept. of Nutritional Sciences
Berkeley, California 94720

Dr. Frederick J. Francis, Voting Delegate
Dept. of Food Technology
University of Massachusetts
Amherst, Massachusetts 01003

Mr. John N. Yeatman, Voting Delegate
U.S. Dept. of Agriculture
ARS, MQ, Color Research Lab.
Plant Industry Station
Beltsville, Maryland 20705

Dr. Amihud Kramer
University of Maryland
Dept. of Horticulture
College Park, Maryland 20742

Mrs. Angela C. Little
Dept. of Nutritional Sciences
313 Hilgard Hall
University of California
Berkeley, California 94720

Mr. James E. Noonan
Warner-Jenkinson Mfg. Co.
2526 Baldwin Street
St. Louis, Missouri 63106

Dr. Henry J. Peppler
Universal Foods Corporation
433 E. Michigan Street
Milwaukee, Wisconsin 53202

The next meeting will be held in Chicago, May 25-29, 1969.

FREDERICK T. SIMON MOVES TO CLEMSON

Frederick T. Simon, a delegate to the ISCC from the American Association of Textile Chemists and Colorists, will succeed the late Harry J. Keegan as J. E. Sirrine Lecturer on textiles at Clemson University.

DR. SANZO WADA DIES

Through Walter Granville we have received word of the death in 1967 of Dr. Sanzo Wada, president of the Japan Color Research Institute (J.C.R.I.). Notification came in a memorial publication prepared by Dr. Wada's associates, most of it in Japanese, but the table of contents, and a brief history of his activities in painting and in color (given in parallel columns) is in English. Born in 1883, Dr. Wada was 84 years old when he died of acute pneumonia in 1967.

Educated as an artist, 1900-1904, he began exhibiting as early as 1907, winning a number of prizes. The Ministry of Education sent him to France for approximately three years to study painting, and on the way back he spent some time in India and Burma studying the oriental classical arts, returning to Japan in 1915. He became interested in textile design and embroidery, and in 1918 organized the "Japan Dyeing Art Research Association." He did some mural painting, and portraits of the Crown Prince and Princess. It was in 1927, the same year that he was appointed a member of the Imperial Art Academy, that he organized the "Japan Standard Color Association" to promote "the rationalization" of color in Japan.

An article in the July-August 1964 Newsletter, No. 172, pages 13-16, tells of Dr. Wada's continuing interest in the problem of color specification and naming, and how in 1945 he found that the Optical Society's recommendations for Munsell renotations were so appropriate to his needs that he decided he would go ahead and prepare a set of materials according to these recommendations. The NewsLetter article tells how he got in touch with Dr. Judd, then president of the Optical Society, about

the project and received his cooperation both for the Optical Society and for the Munsell Color Foundation. The work was so much more difficult, and required so much more time than had been expected, that by the time the work was done the Munsell Company had itself brought its matte surface sample collection, as well as its glossy collection, within tolerances to meet the O.S.A. renotation specification. Thereupon the J.C.R.I. produced their publication as a commemorative issue, limiting it to 100 copies of a very beautifully designed set of color charts that were distributed as gift copies to agencies and individuals throughout the world interested in the cause of color and in the study and development of a color system. All of this, and many more details, regarding this commemorative publication and Dr. Wada's connection with it, are given in the 1964 ISCC NewsLetter article.

The memorial publication by Dr. Wada's associates carries the following table of contents:

Memoirs on the late Dr. Sanzo Wada, and his great works

Dr. Wada's Concern about Munsell Renotation Color System, by Giichi Omoto

Dr. Wada's animating but delicate guidance for the motion picture "Zigokumon (Gate of Hell," by Michio Midorikawa

Dr. Wada's activities in the field of color education, by Yutaka Yamagata

Dr. Wada's work relating to color names, by Katujiro Saito

Dr. Wada's interest in postage stamp design, by Takeo Yamashita

Dr. Wada's work on the pictorial art, by Michiaki Kawakita

Sanzo Wada's Brief History

He lived a long and a full life in the color field. We join with his colleagues in Japan in mourning his death.

Dorothy Nickerson

ANYONE FOR PROBLEM 10?

The Subcommittee for Problem 10, Color Aptitude Test, is being reorganized under the co-chairmanship of Angela C. Little and Louis A. Graham, who would like to hear from members interested in participating in the program as outlined in N. L. #193.

For the benefit of those who might have missed the aforementioned Problem 10 report, following are some unresolved questions that the subcommittee will attempt to answer.

1) What do the various color discrimination tests really test?

2) Why is there a low correlation between the F-M100 hue test and the ISCC-CAT?

3) Do any of the tests measure innate ability? How are the results affected by training and experience?

4) Would a Hue Discrimination Test patterned after the present Saturation Discrimination Test correlate with ISCC-CAT, F-M100, or neither?

5) How valid are the present tests in predicting ability to meet specific job requirements?

CMG FALL MEETING

The Fall 1968 Meeting of the Color Marketing Group will be held at the Atlanta Marriott, Courtland and Kane Streets, in Atlanta, Georgia, on Nov. 10, 11, and 12, 1968. Elizabeth Burris-Meyer and Beatrice West are co-chairmen of the program, entitled "Color in Action". Elizabeth Meehan will be the moderator for all panels.

The first event of the meeting will be a housing tour, sponsored by the Atlanta Home Fashion League, on Sunday, Nov. 10. The Colorfair will be opened that same evening.

On Monday, the theme of the meeting will be discussed in relation to: Communications, by James Wiley; Textiles, by Dario Berizzi; Carpets, by William Mair, Walter Guinan, and Dorothy Liebes; and Furniture, by Nickolas Ungaro, Robert M. Cox, and Betty Marsh. The luncheon speaker will be Jack Weinhart, whose topic is: "Color in Action -- Transportation" or "The Air Strip and the Colored Planes". "Color and the Customers" is the topic of the banquet presentation by Whit Hobbs.

On Tuesday morning the group will view model room displays at Rich's Department Store and hold committee meetings. Tuesday afternoon will be devoted to workshops under the general title: "How to Keep Up With the Color Pace". James Radcliff will have a workshop on Color in Architectural and Building Products"; H. D. Farrar, one on "Color in Retailing"; Domenico Mortellito, one on "Color in Communications"; and there will be a fourth on "Color in Design". At the banquet on Tuesday evening, Jose Martin will speak on "The Color Explosion in Fashion and Furnishings".

PANEL DISCUSSION ON COLOR AT FSPT MEETING

The panel discussion on "Fundamentals and Problems of Color" at the 46th Annual Meeting of the Federation of Societies for Paint Technology (see N. L. #194) will be held at the Hotel Americana on Saturday morning, Oct. 26, 1968. Max Saltzman will be the moderator, and Ruth Johnston, Henry Hemmendinger, and Hugh Davidson will serve as panelists. Subjects to be cover-

ed are: Color Order and the Development of Measures of Color Difference, Application of Color Difference Units, and Uniform Color Space and the Intercomparison of Color Difference Units.

COOPER UNION MUSEUM GETS DIRECTOR AND NEW NAME

A recent issue of The New York Times reports that Dr. Richard T. Wunder has been named as director of the Cooper-Hewitt Museum of Design, the new name given to the Cooper Union Museum. The museum now operates as part of the Smithsonian Institution.

Christian Rohlfing, administrator of the Cooper Union Museum for the past five years, will remain in that post.

Dr. Wunder was curator of drawings and prints at the Museum from 1955 to 1964, at which time he became curator of paintings and sculpture at the Smithsonian's National Collection of Fine Arts. Besides being director of the Museum, Dr. Wunder will also be assistant director of the National Collection.

LEHIGH RECEIVES GRANT FOR COLOR PHYSICS LABORATORY

A grant of $165,000 has been made by the State of Pennsylvania's Science and Engineering Board to aid in the development of a new Color Physics Laboratory at Lehigh University.

The laboratory will be under the direction of Dr. Eugene M. Allen, research professor in chemistry at Lehigh and a delegate to the ISCC from the American Association of Textile Chemists and Colorists.

INTERNATIONAL SYMPOSIUM ON SENSORY EVALUATION OF FOOD

An International Symposium on Sensory Evaluation of Food will be held in Kungälv (Göteborg), Sweden, Sept. 9-13, 1968. The symposium is sponsored by the International Committee of Food Science and Technology, Swedish National Committee of Food Science and Technology, and the Swedish Institute for Food Preservation Research. There will be discussions on the application of science to the sensory evaluation of food, with specific reference to odor, flavor and taste, texture, and appearance and color. Angela C. Little, a delegate from the Institute of Food Technologists, will discuss appearance and color in food testing.

ACTA CHROMATICA RESUMES PUBLICATION

The Color Science Association of Japan, through Dr. Tarow Indow, International Liaison Director of CSAJ, has recently informed us that their publication, ACTA CHROMATICA, has resumed publication after a one-year suspension. The annual rate for foreign subscribers is $5.00. Back issues for four numbers of Volume 1 are still available at $2.00 for No. 1 (1962), and $5.00 each for Nos. 2, 3, and 4 (1963, 1964, 1965). No. 5 of Volume 1, dated October 1967, is now available. It, and the next issue, to be published within a year, are also available at $5.00 each. Checks covering the annual rate, and back issues, should be made payable to the Color Science Association of Japan. This can be done through Mita Branch, Mitsui Bank, Ltd., Mita Minato-ku, Tokyo, Japan.

This publication is primarily in English, and provides an excellent means for color workers in this country to keep in touch with color research being done in Japan. The lead article usually is an invited paper by some well-known foreign worker, e.g.: Wyszecki on Metameric Object Colors; Nickerson on Color Change with Change of Light Source - an Unsolved Problem in Colorimetry; Wright on Light as a Carrier of Colour Information and Its Processing in the Eye; MacAdam on Specification of Color Differences; Boynton & Scheibner, On the Perception of Red by "Red-blind" Observers. In each number one such paper is followed by reports in English by Japanese workers. The following list of Editorial Board members attests to the quality that may be expected:

T. Azuma (Central Research Lab., Tokyo Shibaura Electric Co., Ltd.)

*R. Hioki (Dept. of Engineering, University of Tokyo)

T. Indow (Dept. of Psychology, Keio University)

T. Kaneko (Dept. of Psychology, Tokyo University of Education)

H. Kubota (Institute of Industrial Science, University of Tokyo)

H. Masaki (Railway Technical Research Inst., JNR)

L. Mori (Central Research Lab., Tokyo Shibaura Electric Co., Ltd.)

Y. Nayatani (Osaka Branch, Electrotechnical Lab.)

M. Nonaka (Central Research Lab., Hitachi, Ltd.)

K. Okada (Lighting Research and Advisory Bur., Matsushita Electric Industrial Co., Ltd.)

M. Oshima (Dept. of Medicine, University of Tokyo)

M. Sato (Dept. of Engineering, University of Tokyo)

*Editor

Applications for subscriptions and business communications should be addressed to:

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Dorothy Nickerson

THE COLOUR GROUP (GREAT BRITAIN)

By way of a letter to Ralph Evans, the new Honorary Secretary of The Colour Group, Mr. I.T. Pitt, has extended an invitation and promise of a warm welcome to any ISCC member able to attend the Group's meetings.

Mr. Pitt is with the Research Laboratories of Kodak Limited at Wealdstone, Harrow, Middlesex.

CERAMIC COLOUR STANDARDS

The British ceramic industry, in collaboration with the British Ceramic Research Association, the National Physical Laboratory and the Society of Dyers & Colourists has produced a set of twelve coloured tiles for the calibration and control of colour measuring instruments. Such tiles will be of considerable value wherever colour measurement is carried out. For example, they can be used to indicate how accurate a colorimeter is, i.e. how closely it determines XYZ values or how precise it is, i.e. how reproducible measurements are; they can reveal the agreement between different instruments of either the same or different models; they can show when an instrument is no longer performing correctly.

The choice of the twelve was governed by a number of factors. Permanence, temperature insensitivity, and absence of fluorescence in the 300-700 nm region, were essential. From the tiles which possessed these qualities, 12 were chosen to cover a reasonably wide region of colour space, including three neutral greys. In order to provide the maximum value in diagnosing instrumental faults, the shapes of the reflectance curves were taken into consideration as well as the colour of the tile.

One batch of tiles was made for each colour under the most stringent control possible, and 1,000 tiles for general sale were selected from the batch by visual inspection to ensure freedom from significant blemishes. From these 1,000, 50 sets were specially selected for sale as NPL - calibrated standards, the most representative being designated the Master Set. Calibration data of the Master Set will be determined at the National Physical Laboratory as accurately as possible and this will be supplied with each uncalibrated set to indicate approximate values.

It is believed that the variations between the selected tiles of each colour will be small enough to be ignored for many purposes. Where greater accuracy is required the NPL - calibrated standards should be used.

Uncalibrated sets of Ceramic Colour Standards can be obtained from: -

The British Ceramic Tile Council,
Federation House,
Station Road,
Stoke-on-Trent,
England.

and sets of NPL-calibrated tiles from: -

Metrology Centre,
The National Physical Laboratory,
Teddington,
Middlesex,
England.

The Ceramic Tile Standards cost £7 per set, the NPL-calibrated tiles, from £ 70, both prices including postage to any part of the U.K., otherwise they are f.o.b.

A SECOND REVIEW (SEE N.L. #191) OF NOVEMBER -DECEMBER 1967

The Rays Are Not Coloured, by W.D. Wright (American Elsevier Publishing Co., Inc., New York 1968, 154 pp., $5.95)

Review by Robert C. Sproull:

The Rays Are Not Coloured is not a textbook on color nor is it a reference book on color; but it was not intended as such. The book consists of a series of nine lectures delivered by Professor Wright over the past several decades and covers a series of subjects ranging from a philosophy of color through a panorama of color vision, night driving, color education, television and colorimetry. The statement of the publishers concerning the book is appropos: "If we are seriously interested in the world around us, and are prepared to wonder at the important role color plays in our lives we are ready to be stimulated by Professor Wright's essays."

The first reading is certain to be both stimulating and tantalizing. So much of Professor Wright's vast experience in the field of color is tucked away in unexpected places that a second reading is inevitable. To those of us who are relative newcomers to the world of color, the book is readable, understandable and enjoyable; but one suspects that there is such a diversification of subject matter and such a sophisticated depth in the color concept of the author that the experts will be equally entertained.

To all who have pondered the meaning of color, sought to teach it or worked with it, the book will be reward-

ing. Any who have been injured or frightened on our highways would sleep easier if they knew our highway engineers had read the chapter on The Visual Task in Night Driving. As a practicing dentist the reviewer would be overjoyed if dental educators read and accepted the emphasis on the importance of vocational guidance for color defectives and the emphasis on the need for color education in our schools.

An example of the unusual and thought provoking content of the book is found in Chapter 2, Toward a Philosophy of Colour. There are many other noteworthy ideas in this chapter, but one which is likely to surprise many (as it did Professor Wright himself) is his proposition that color may, after all, be objective instead of subjective. Briefly he bases this on the fact that the same retinal receptors and visual cortex are used for both our space and color perception. (Professor Wright's reasoning should be read to be fully appreciated). An object seen lying on a table is accepted as the real object, not as an introspective image within us. The close association of the color of the object with its three dimensional image leads to the proposition that both are objective. This should present a fascinating possibility for the next bar room discussion as to whether there is color on a deserted island. If one chose to argue that color is objective and found he were losing to the subjective adherents, he could use Professor Wright's reasoning to achieve victory - or threaten to wipe out the entire island by declaring it subjective also.

Seriously, the book is what is claimed for it, "one of the most readable and enjoyable scientific texts to be published for a considerable time."

BOOK REVIEW

Manual of Color Aerial Photography. Published by the American Society of Photogrammetry, 1968. 550 pages. Current price: ASP members, $19.00; non-members, $22.50. After Oct. 1, 1968: ASP members, $21.00; non-members, $24.50.

This strikingly handsome volume serves as an excellent example of the invaluable role that color can play in illustration. From the samples of colors as seen by the color deficient to the set of ISCC-NBS Centroid color chips attached to the back cover, the book is copiously supplied with color. Nearly one-eighth of the 550 pages are in full color, and many of these are full-page reproductions of aerial photographs. Most of these illustrations are both beautiful and instructive. Particularly impressive are the ten shots of the earth from the Gemini and Apollo-Saturn flights, the aerial view of the beautiful, walled town of Nördlingen in Bavaria, the picture of a deep-water eddy north of St. John's Island in the Carribean, the infra-red view of desolation produced by strip mining in Appalachia, and the picture of Seal Rock, Montague Island, Gulf of Alaska. Many others, while perhaps not as beautiful as these, are interesting and informative. The reader can understand readily how useful aerial color photography can be in anthropological interpretation, archeological reconnaissance, crop and soil analysis, geologic comparison, earth resources surveys, highway engineering, land form analysis, mapping, etc.

A special bonus from the standpoint of color is provided by the appendix by Kenneth L. Kelly, and Deane B. Judd on the ISCC-NBS Centroid Color System, including the color chips mentioned earlier.

The material in Chapters II through VIII deals with planning and operation of missions; cameras, optics, and filters; films; the chemistry and processing of films; color printing techniques; sensitometry; and metric quality. Being no aerial photographer, and only the meanest of amateurs, I am not qualified to comment on the adequacy of this part of the technical text. But even in this part of the book there is some material that might well be of general interest: for example, a series of twelve full-page maps of the U.S., each showing in color code the number of clear days in each month that can be expected to meet the solar altitude requirement for color photography, and a discussion of the effects of altitude on the human body.

The part of the text that deals with the nature and language of color is confined largely to Chapter I, The Language of Color, and to Appendix 3, The ISCC-NBS Centroid Color System. Chapter I is relatively short and contains much in the way of oversimplification and/or error. The treatment of primary colors, the nature of the stimulus and response, color temperature, metamerism, and other matters, could be improved. It is not surprising to find that such is the case, for it is difficult, if not impossible, to present an account of the psychology, psychophysics, physiology, and physics of color that is both brief and accurate.

In spite of this shortcoming, this book deserves attention and examination by anyone interested in or working in the field of color, for it provides a dramatic presentation of color in action.

Ed.

STANDARD FRENCH NUDE

(The following article was prepared by C.S. McCamy, of the National Bureau of Standards, for the newsletter of the Society of Photographic Scientists and Engineers and is reproduced here by permission of the author.)

If you're not interested in such things as Temptation, Geisha, Romance, Love Light, Irresistible, Intimate Mood, Heart's Desire, Flirtation, French Nude, Enchantress, Bunny, Vamp, and such like, you can skip this item. But if you are interested or have sometimes pondered over what color Garter Blue

really is, stick around. What you need is NBS Circular 553, "The ISCC-NBS Method of Designating Colors and a Dictionary of Color Names". You might expect Anti-Corrosive Brown, Engine Grey, Government Wall Green, Hospital Ship Green, Instrument Black, Machinery Green, and National School Bus Chrome; but how about Youth Yellow, Whimsical, Virgin, Surrender, Smog, Smile, Orchid Smoke, Octoroon Rose, Teen Age Pink, Mermaid, Lover's Note, Green Breath, Grapenuts, Bastard Saffron, Blue Prose, Best Effort, or Bear's Hair. For an appetizer, try Bladder Green, Ambulance, Crash, Pigeon Blood, Liver, Burn Blue, Caput Mortuum, Carbuncle, Dead Carnations, Dregs of Wine, Gallstone, Pi Yu, Pallid Mouse Gray, Puke, Rodent, or just plain Rat. There is no Mood Indigo but we have Mood Violet, Song of Norway, Minuet, Sonata, Sung Green, Melodious, and Quiet. Perhaps you might prefer Prudence, Quality, Profound, Serene, Secret, Resolute, Remote, Modest, International, Independence, Ideal, Eminence, Fidelity, Enduring, Dignity, or Conclude. Tennis anyone, or Hockey, Snowshoe, Skating, or Ski? One that can't be tied: Unique. Two that can: String and Twine. The NBS coloring book comes from the Government Printing Office, Washington, D.C. 20402 for just $2.00.

But if you want to cast your Baby Blue Eyes (that's a color) on 251 actual color chips, you will want "ISCC-NBS Centroid Color Charts" NBS Standard Sample No. 2106. You can be in the chips for $5, while existing supplies last. Write: Office of Standard Reference Materials, National Bureau of Standards, Washington, D.C. 20234. Included are Nil and Invisible Green. That you got to see.

EB and FLO®

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THE "GAY NINETIES" IN COLOR

While delving through the basement sales in our town (Plainfield, N.J.), I came across a rather sophisticated item which produced colored images in depth from black and white glass slides. It was an antique "color T.V." from-Grandma's day. After dedusting and repair it was restored to use. No information on it was obtainable at the library.

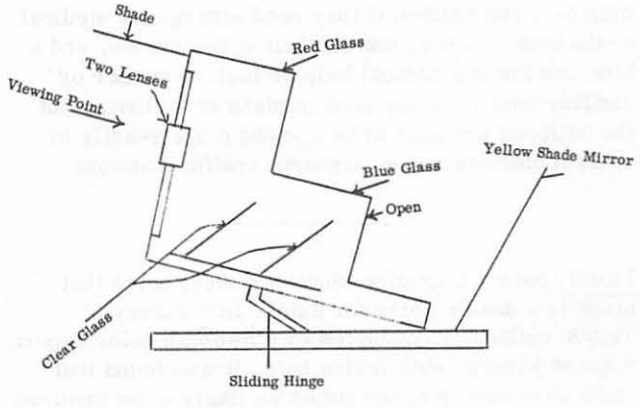
This instrument is called a Krómskóp, manufactured by a company in Philadelphia. The label reads: Ives Patent Krómskóp Manufactory, 1324 Chestnut St., Phila. There are a number of patents listed from 1890 thru 1899 on another tag. A box of glass slides is with it. The glass slides are in triplicate, joined by tapes. Each slide has two similar pictures, which were silver deposited on the glass slides.

The Krómskóp consists of a box shaped like three steps. The top step contains a red glass, the second step a blue glass, and to the top of the third step is attached a yellow shade mirror, which can be swung thru a 90° angle. Inside the box are two glass plates at 45° angles to the bottom on a movable board. At right angle to the top step, on the side, are two magnifying lenses. This side is hinged from the top, thus making the inside contents removable. The box can also be adjusted at various angles, as it is hinged at the end of the lower step.

The slides are placed over the red and blue filters and at right angles to the blue second step, which is open. In bright daylight the writer is able to produce a colored picture in depth by manipulating the angles at which the light shows through.

Following is a rough illustration.

Lawrence Wineburgh



CANADIAN PACIFIC ADOPTS COLOR CODE

(Adapted from The New York Times, June 18, 1968, under byline of Philip H. Dougherty.)

The Canadian Pacific Railway Company has announced a new corporate symbol ("a striking blend of a triangle to represent motion, a circle for global operations and a square for stability") that will be used on its trains, planes, ships, trucks, hotels and telecommunication network. But more interesting is the color code to be used for the different modes of transportation:

Red for trains
Orange for planes
Green for ships
Blue for trucks

Coincidentally, just below the Times article on your editor's desk was a list of moods or ideas supposedly evoked by different colors. (The list appeared in Atlantic News, June 1968, as reprinted from Marketing Communications for May 1968, and is attributed to Henry C. L. Johnson, a marketing analyst.) Among others, the following associations are listed for the colors indicated:

Red -- Excitement, Fulfillment, Love (Human)

Red Orange -- Love (Physical), Passion, Sacrifice, Slaughter, Warmth (Inner)

Green -- Beauty (Human), Contentment, Eternal Life, Friendship, Fruitfulness, Health, Hope.

Blue -- Constancy, Faith, Fidelity, Honor, Immortality, Sadness, Tenderness, Truth.

Select your transportation accordingly. You can't have everything.

COLOR ON THE HIGHWAYS

The New York Times reports that colored toy balloons will be used as distress signals under a plan of the N. Y. State Dept. of Motor Vehicles. Motorists are to display a red balloon if they need emergency medical assistance, a green one for police assistance, and a blue one for mechanical help or fuel. A banner or handkerchief could be used in place of balloons, but the balloons are said to be spotted more readily by other motorists and by airborne traffic monitors.

Family Safety magazine (Summer 1968) notes that black is a deadly color for autos. In a survey of 31,000 collisions conducted by a Swedish color expert, Sigvard Viberg, with police help, it was found that black cars are up to ten times as likely to be involved in accidents as are lighter-colored cars. Next to black, the most dangerous colors were reported to be all shades of brown and gray. Pink was found to be the safest car color.

Viberg was said to believe that the dark and dull hues are more dangerous because they are the hardest to distinguish against a background of trees or buildings and the most difficult to detect at dusk.

Perhaps, at least as an interim safety measure, all vehicles on the streets and highways should be required to keep their headlights turned on at all times.

The Newark News (June 3, 1968) reports that medium brown was the favorite color of new car buyers during the 1967 model year, accounting for very nearly 14 percent of sales. That figure was reported in a DuPont Company study compiled by Norman J. Mooney, individual member of ISCC, who was quoted as stating that there is "increased popularity of medium to dark shades in most categories".

FOREIGN STANDARDS SOLD THROUGH USA STANDARDS INSTITUTE

Anyone interested in purchasing foreign standards can profit from Fred Billmeyer's recent experience. President Billmeyer ordered a copy of a British Standard on light sources from the British Standards Institution and was surprised to receive the copy from USASI in New York. It seems that the USASI maintains a file, and sales copies, of the standards supplied by the National Standardizing Bodies abroad and also acts as their sales agent in the U. S. A. Any orders sent to these foreign standards bodies are customarily referred back to USASI. Therefore, time can be saved on such orders if they are sent directly to the USASI.

A BOOK ON COLOR BY WILLIAM MEYER?!

A short while ago, a telephone call from the Laser Laboratory of the Medical College inquired about a book on color by William Meyer. Do I have a copy and could they borrow it? While I try to keep a fairly complete library on color, comprising about 200 volumes -- going back to 1670 -- I had to confess that William Meyer's book was not among them. The year of publication or the publisher were not known to the party making the inquiry.

I felt that possibly the reference librarian of the University of Cincinnati Library could be of help. After a thorough search through the references available to her -- the answer was negative. Next, the reference librarian of the Cincinnati Public Library was put on the trail. Again, no results.

In desperation, I decided to find out what was the original source of information which gave the title and the author. Three telephone calls later, the light broke through the clouds: the originally transmitted-by-phone "Bill Meyer" had been given a more dignified first name by one of the secretaries -- thus "William Meyer" instead of Billmeyer.

Now my answer was "Yes", and I reflected how much easier I could have identified Principles of Color Technology, if both names of the authors were given to me as "William Meyer" and Max Saltzman!

Isay Balinkin

A PROBLEM IN COLOR COMMUNICATION

The need for standardization in color language has been underscored again by an experience of J. Woolson Brooks, individual member. Mr. Brooks, an architect, found that, in soliciting bids for carpet for the library at Iowa State University, his specification of the desired colors for each of the three yarns to be used "baffled" the representatives of the carpet mills. The specifications were given in both ISCC-NBS and Munsell terms.

Mr. Brooks asks that more effort be made "to popularize at least one of these systems."

REPRINTS WITH THIS ISSUE

"On the Interaction of Light with Matter" by Joseph T. Atkins and Fred W. Billmeyer, Jr. Color Engineering, May-June 1968, 40-47, 56.

"Chromatic Strengths of Colors, Part II. The Munsell System" by Ralph M. Evans and Bonnie K. Swenholt. J. opt. Soc. Amer., 58, April 1968, 580-584. (Note that a printing error has been made in the title as given on the yellow cover. "Chronic" should be "Chromatic"!)

A HARVARD MAN SPEAKS (SORT OF)

Harvard men, it seems, sometimes have difficulty communicating: Edward Everett, once President of Harvard, delivered a major address at Gettysburg. The following day he wrote Abraham Lincoln: "I wish I could have said in two hours what you said in two minutes."

Arthur Pope, of Harvard's Fine Arts Dept., once spoke at a meeting of the Optical Society of America. Later, he wrote: "They didn't seem to know what I was talking about."

Professor George Wald achieved some local fame by remarking at the close of a classroom session, "Boy, this was a lousy lecture." (If Professor Wald's name is familiar, it is because he won in 1967 a Nobel prize (in biology) for his work on the physiology of the eye.)

Henderson Wolfe, Harvard '27

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"Stereoscopic Acuity Underwater" by Saul M. Luria. Submarine Medical Research Lab., U.S. Naval Submarine Medical Center Rep. No. 510, 27 Feb. 1968.

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