

COLOUR LITERACY FORUM

CONNECT - INNOVATE - EDUCATE

What?

Colour Literacy Forum #4

The Colour Literacy Forum is a virtual platform featuring presentations and interactive conversations focused on updating and expanding 21st century colour education at the university level. The goal of this global collaboration is to develop an interdisciplinary STEAM (Science, Technology, Engineering, Arts, Math) model that aligns colour education with current needs in the culture, provides cutting-edge resources, and offers dynamic networking opportunities for all stakeholders.

How? When?

A Virtual Gathering via Zoom

Friday, March 31, 2023
11 am - 12:10pm Eastern Time

INFO & REGISTRATION: www.colourliteracy.org



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The Talks & Speakers

Colour & Materials: Past, Present & Future Colour Perception Series - Part 2

TALK 1: PAST

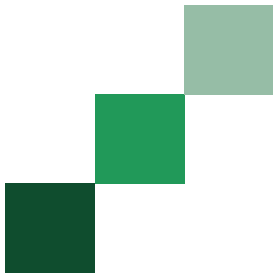
COLOURS OF THE ANCIENT WORLD

Archaeologist Dr. Carolyn Boyd shines a light deep into our past, as she unearths the story told by prehistoric hunter-gatherers of the Lower Pecos Canyonlands of Texas and Coahuila, Mexico, who created some of the most colorful, complex, and enduring rock art of the ancient world. She will share insights about her journey of discovery researching the White Shaman Mural, an ancient visual narrative telling the story of the birth of the sun and the beginning of time. Unlike previous scholars who have viewed the rock art as random and indecipherable, Boyd demonstrates that the White Shaman Mural was intentionally composed as a visual narrative. Artists depicted and animated the actors in this narrative through the image-making process, including paint ingredients, the painting sequence, and a semantically charged, color-coded graphic vocabulary. Boyd's research methods include a formal analysis of the art to document and describe the diagnostic pictographs and digital microscopy to reveal the mural's painting sequence. Ethnographic observations of indigenous groups living in Mesoamerica have provided Boyd with insights into the framework of ideas and beliefs that informed production of the narrative and the rich cosmology it communicates.

THE SPEAKER



Dr. Carolyn E. Boyd holds a Ph.D from Texas A&M University and is the Shumla Endowed Research Professor in the Department of Anthropology at Texas State University. She is an artist and an archaeologist specializing in iconographic analysis. Her primary interests are the documentation and interpretation of Pecos River style rock art in southwest Texas and Coahuila, Mexico. Dr. Boyd's research examines the role of hunter-gatherer artists as active participants in the social, economic, and ideological fabric of the community, and the function of art as communication and a mechanism for social and environmental adaptation. In 1998, Boyd founded a nonprofit organization, Shumla Archaeological Research and Education Center, to preserve through documentation and education the prehistoric art of the Lower Pecos. Current projects include Origins and Tenacity of Myth in Archaic Period Rock Art of Southwest Texas and Northern Mexico, funded by the National Endowment for the Humanities, and Layers of Meaning: Chronological Modeling & Pictograph Stratigraphy, funded by the National Science Foundation.



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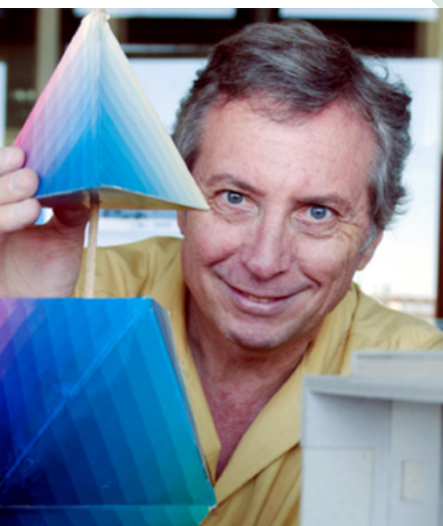
TALK 2: PRESENT

Colour & Materials: Past, Present & Future Colour Perception Series - Part 2

THE CONCEPT OF CESIA (VISUAL APPEARANCE OTHER THAN COLOR): EXAMPLES IN ARCHITECTURE

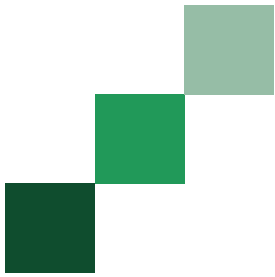
Cesia refers to the perception of the different spatial distributions of light. It includes all the visual sensations spanning from transparency to translucency, matte opacity to mirrorlike appearance (passing through glossy appearance), and lightness to darkness. Color and *cesia* are different aspects of the perception of light, both contribute to the visual appearance of objects. Color deals also with lightness and darkness, but there are aspects that cannot be described by the three classical color dimensions (hue, lightness, and chromaticness). Thus, dimensions of *cesia* can be added to further specify a color sensation: a certain color surface or object may be opaque, but it may also be transparent or translucent, matte or glossy, etc. *Cesias* are defined by three dimensions or variables: perceived permeability (from opaque to transparent), perceived diffusivity (from regular or clear to diffuse), and darkness (from light to dark). In both color and *cesia* the relationship between stimulus and sensation is not fixed but depends on three main factors –illumination, object, and observer– and is affected by other factors such as visual context, adaptation, contrast, etc. After an explanation of the concept of *cesia*, some applications and examples will be shown, mainly in the field of architecture.

THE SPEAKER



Dr. José Luis Caivano is a research fellow at the National Council for Research, Argentina, and professor at Buenos Aires University, in the School of Architecture, where he also leads the Color Research Program. He holds a degree in architecture, a PhD in theory and history of art, and the highest category in the national research system of Argentina. He was a research associate at the Center for Language and Semiotic Studies, Indiana University, United States, president of the International Color Association (AIC), the International Association for Visual Semiotics (IASV), and the Argentine Color Group (GAC). Caivano has been appointed as honorary member of Ad Chroma (France), the Portuguese, and Mexican Color Societies. He serves in the editorial board of various international journals and is a senior editor of *Color Research and Application*. He has more than 190 publications, most of which are freely available at:

<https://colorsemiotica.wordpress.com/publicaciones/>



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TALK 3: FUTURE

SUSTAINABLE WOOD-BASED STRUCTURAL COLOUR

Nature's brightest colours – like those found in peacock feathers or butterfly wings – are created through microscopically small nanostructures. When light hits these structures, our eyes perceive intense and vivid colours. Unlike pigments or dyes, this colour arises from the physical structure of a material, without the need for any particular light-absorbing compounds. Shiny or glittery effects – very popular in fashion and design today – are usually created using environmentally harmful pigments, plastics, and metallic foils. A sustainable alternative is presented here for the future of glittering effects, namely wood-based structural colour. This could lead to a green transformation in the effect pigment industry. The visual opportunities of this new method of generating colour are explored by altering the shape, colour and texture of the materials onto which the colour is applied.

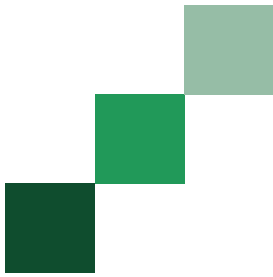
THE SPEAKERS



Noora Yau is a designer and currently a Ph.D. candidate under the supervision of Prof. Kirsi Niinimäki in Department of Design at Aalto University School of Arts, Design and Architecture, Finland. Yau obtained her master's degree in Product and Spatial Design at Aalto University and Bachelor's degree in Ceramic and Glass Art and Design. Her research focuses on the prospects of nanocellulose based structural color in art and design applications.



Konrad Klockars is currently a Ph.D. candidate under the supervision of Prof. O. J. Rojas in the Department of bioproducts and biosystems at Aalto university. Konrad obtained his master's degree in chemical, bio- and materials engineering at Aalto University, Finland. His current research focuses the material properties of structural color coatings obtained through the self-assembly of nanocellulose.



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Our Partners

Colour Literacy Forums are organized by the Colour Literacy Project, in partnership with the Inter-Society Colour Council (ISCC), the International Colour Association (AIC), and Cumulus, a leading global association of art and design research and education.



The Colour Literacy Project (CLP)

The CLP is dedicated to exploring new approaches to colour education from pre-K to university to industry professionals. Fluency with the language of colour sharpens our sensory perceptions, enhances our ability to communicate, and connects us to the world. 21st century colour literacy isn't just for scientists and artists -- it's for everyone. <https://colourliteracy.org/>



Cumulus Association

Cumulus is the leading global association of art and design education, representing a dynamic ecosystem for knowledge exchange and collaboration in art and design pedagogy, research, and practice. <https://cumulusassociation.org/>



Inter-Society Colour Council (ISCC)

Inter-Society Colour Council (ISCC) is the principal professional society in the field of color in the USA and a member of the AIC. We are a community of color professionals who connect across disciplines to share research-based knowledge regarding the science, design, and aesthetics of color, and to promote an innovative model for 21st century color education. <https://www.iscc.org/>



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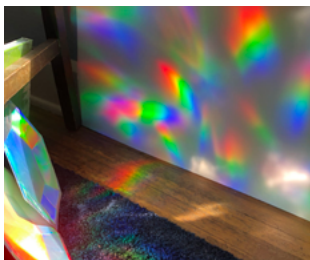
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International Colour Association (AIC)

The International Colour Association (AIC) is composed of national colour organizations and members representing over 30 countries. Founded in 1967, the AIC aims to encourage research in all aspects of colour, to disseminate the knowledge gained from this research, and to promote its application to the solution of problems in the fields of science, art, design and industry on an international basis.

<https://aic-color.org/>



Study Group on Colour Education (SGCE)

The Study Group for Colour Education (SGCE) of the AIC is an international network of scientists, teachers within the field of colour, and other professionals with a specific interest in colour education. Aims: exchange of knowledge and experiences among its members; stimulation of teaching and research; to inform about coming congresses, seminars, workshops and exhibitions which might be of interest; to share news from congresses, seminars, workshops, publications and exhibitions.