



From Knowledge to Wisdom

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Modern Architecture and Color

Conservation of 20th century building materials and surfaces

In 20th century architecture, color plays different roles determining both aesthetic value and significance of modern buildings: from a tool of spatial qualification, to an element connected to social, pedagogical or healing aspects, to a feature of natural and urban landscape. The legacy of this season of experimentation and innovation is today dealing with the fragility of building materials and surfaces, that are progressively changing the heritage in the eyes of the observer.

The theme of conservation and preservation of modern polychrome surfaces highlights aspects and criticalities, both theoretical and operative, that require specific in-depth studies.

The special issue of JCEA brings together relevant ongoing researches and recent studies presented as part of the International Research Seminar “Modern Architecture and Color. Knowledge and conservation of 20th century building materials and surfaces”¹ promoted by the Research Cluster “He.Modern - Heritage culture and Modern design” of the Iuav University of Venice, held in Venice on 28th October 2022.

Each paper is based both on the historical analysis of the archival documentation and the *in situ* investigation of relevant buildings characterized by an experimental use of color, understanding their qualities and providing new methods of characterization of materials and techniques, new approaches for the analysis of alteration and degradation phenomena, and innovative strategies for the preservation and maintenance program.

The studies reflect the interdisciplinary nature of the international research intended as an opportunity for dialogue between Italian and foreign scholars on case-studies and topics not yet investigated, with the aim of making a contribution to knowledge and preservation of modern architectural heritage.

Sara Di Resta, Greta Bruschi, Paolo Faccio

Department of Architecture and Arts, Università Iuav di Venezia

¹ International Research Seminar “Architettura e colore. Conoscenza e conservazione di materiali e superfici del XX secolo / Modern Architecture and Color. Knowledge and conservation of 20th century building materials and surfaces”, Aula Magna Tolentini, Università Iuav di Venezia, 28th October 2022. As part of the research and educational activities of SSIBAP - Post-graduate School of Specialization in Architectural and Landscape Heritage, and research cluster He.Modern - Heritage culture and Modern design. Under the auspices of SIRA – the Italian Society for Architectural Conservation/Restoration, DOCOMOMO Italy, FOAV Federazione Regionale Ordini Architetti Pianificatori Paesaggisti e Conservatori del Veneto, and Ordine degli Architetti, Pianificatori, Paesaggisti e Conservatori di Venezia. Organizing Committee: Sara Di Resta, Greta Bruschi. Scientific Committee: Paolo Faccio, Susanna Caccia Gherardini, Angelo Maggi, Marco Pretelli, Pierre-Antoine Gatier, Giacinta Jean.

The outcomes of the International Research Seminar are collected in this JCEA special issue, edited by G. Bruschi, S. Di Resta, P. Faccio.

Preface

Modern Architecture and Color. University, Research, Education.

Benno Albrecht

Rector, Università Iuav di Venezia

The special issue of the *Journal of Civil Engineering and Architecture* focuses on the activities of the research cluster “HeModern - Heritage, culture and Modern design” of the Università Iuav di Venezia, that consists of national and international scholars, institutions and companies in the field of architectural preservation.

The Department of Architecture and Arts is the place where the investigation activities are fuelled by the discussion and collaboration between different cluster research, that carry out multidisciplinary paths interpreted not as a sum but as an interaction of skills.

The research cluster “HeModern” investigates tools and methods of preservation of modern heritage, from design items to buildings, from cities to territories.

Architectural conservation, science and technology, history, design and urban planning are the subject areas that converge on the themes explored in the special issue.

The selected papers address the theme of color in 20th-century as a result of the international research seminar “Modern Architecture and Color. Knowledge and conservation of 20th century building materials and surfaces”, held in Venice in October 2022. The main topics include the role of color in the design path and in photographic representation; the knowledge of modern building materials between polychromy and polymateriality, tradition and innovation; sustainable diagnostic methods for modern heritage; new strategies for conservation intervention.

Modern and contemporary heritage represents the legacy of the most important architects of the 20th century. The preservation of their works involves research and education, and represents one of the cultural challenges that the Università Iuav di Venezia has decided to take up.



The poster for the seminar "ARCHITETTURA E COLORE" features a central image of a bicycle parked against a wall with a grid of blue and pink squares. The text is arranged around the image, providing details about the event, including the date (28.10.2022), location (Tolentini aula magna), and time (ore 10>18). It also lists the organizers, scientific committee, and speakers.

ARCHITETTURA E COLORE

conoscenza e conservazione di materiali e superfici del XX secolo

28.10.2022
Tolentini
aula magna
ore 10>18
online Teams➤

Giornata internazionale di studi organizzata in occasione della IV edizione di Iuav per il Restauro

a cura di Sara Di Resta e Greta Bruschi

comitato scientifico Paolo Faccio, Susanna Caccia Gherardini, Pierre-Antoine Gatier, Giacinta Jean, Angelo Maggi, Marco Pretelli

saluti Benno Albrecht rettore Iuav, Francesco Musco direttore ricerca Iuav, Paolo Faccio direttore SSIBAP Iuav, Roberto Beraldo presidente OAPPC

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Modern Architecture and Color. Knowledge and conservation of 20th century building materials and surfaces, program of the international research seminar, 28th October 2022, Venice (Italy).

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A New Chromatic Vision: The Early Impact of Color Photography on the Representation of Architecture

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Abstract: The role of color photography in the representation of architecture is a subject little investigated by architectural historiography. The link between the color values of architectural design and its visual transmission in the early phase of modernism was certainly problematic. Color photography had an undeniable impact on architectural color in practice: color photographs in books and periodicals published between the 1940s and 1960s clearly influenced the use of color in architectural design.

Key words: 20th century architecture, color, photography, historiography.

1. Introduction

On 28 April 1952, a crowded audience attended a lecture at the RIBA by the American architectural critic, educator, and photographer George Everard Kidder Smith (1913-1997), who surprised them with a superb selection of color transparencies of Italian architecture. The *Architectural Review* editor James Maude Richards (1907-1992) wrote afterwards: “If only one had colored photographs like Mr. Kidder Smith’s readily available, and technical resources to reproduce them, architectural publications could be very much livelier and do a more worthwhile job in bringing architecture on the printed page than is possible at the moment” [1]. This anecdote makes us rethink the role of color photography in the representation of architecture, a subject that has remained under-investigated in architectural historiography.

Kidder Smith had a very strong interest in capturing the buildings he visited and wrote about recording them on black and white film or color transparencies (Fig. 1). He believed that architecture seen in color pictures would finally give a new strength to the perception of space on lifestyle magazines, even if most photographers continued regarding it with suspicion.

Edwin Smith (1912-1971) resented the loss of creative

control that stemmed from the fact that few photographers had the facilities to process their own color material [2]. Jan Versnel (1924-2007) thought that color photography interfered from the photographer’s primary task of delineating architectural features.

2. The Chromatic Values of Architectural Design and Its Visual Transmission

Attempts to develop color photography had been undertaken since the invention of the medium, but it was only with the introduction of the Kodachrome transparency film in 1935, followed by Kodacolor negative stock in 1942, that a major breakthrough was achieved. Although these processes later became mainstream in architectural photography, there has been no clear account of its origins in practice. We know that John Maltby (1910-1980) in UK experimented with color and that the *Architectural Review* essayed its first major attempt at color printing in its feature on the new BBC (British Broadcasting Corporation) building in London in 1932. One of the first projects by American architectural photographer Ezra Stoller (1915-2004) was a set of color pictures to be taken during New York’s World Fair, which were published in *Architectural Forum* in 1939.

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Fig. 1 Self-portrait in color of G.E. Kidder Smith (lower left) and his wife Dorothea (upper middle with a raised arm), Temple of Juppiter, Baalbek, Lebanon, 1950. © Archivio Progetti, Università Iuav di Venezia.

The connection between the chromatic values of architectural design and its visual transmission in the early phase of modernism was certainly problematic. Color photography had an undeniable impact on architectural color in practice: color photographs in books and periodicals published between the 1940s and 1960s clearly influenced the use of color in architectural design. Le Corbusier's *Villa Savoye* was almost exactly as monochrome as the many black and white photographs taken of it. This kind of imagery was spawning an architecture deficient in chromatic values.

But some architects, such as Gio Ponti (1891-1979), and photographers, like Giorgio Casali (1913-1995), went beyond the established monochromatic representation of their buildings, and in their pictures and articles for *Domus Magazine* considered color in a new way. Ponti was enthusiast when *Domus* No. 312 (November 1955),

dropped few lines regarding his happiness in publishing in architectural color photographed images. The images he refers to were elevations of Swedish houses in Gutenberg, placing the emphasis on chromaticism in architecture so that even in Italy, where various vernacular buildings are traditionally painted or plastered with lively colors, we move from deliberately melancholic grey buildings to a colorful new architecture, “because—as Ponti states—you have to make beautiful houses, beautiful neighborhoods, and lively happy colorful cities” [3].

Exactly a year before, Ettore Sottsass (1917-2007) published in *Domus* No. 299 an article titled “Structure and Color” concerning the role in design, using the chromatic issue in order to construct a critical approach towards a culture of design considered no longer suitable to provide answers to the social and cultural transformations taking place. Sottsass became known for his asymmetric forms and, perhaps most of all, his flamboyant use of color, often in bold, clashing combinations. “You don’t save your soul just painting everything in white,” he once wrote. “Color can arise and be in harmony with the imperatives of structure, without destroying it.” In the same article, Sottsass notes how the expressiveness of architecture had been entrusted, up to that moment, exclusively to the shape and structure: “By dint of whitening the walls, by dint of lightening and wanting light we have almost lost the meaning of the colors in Architecture” [4]. And quoting the painter Theo van Doesburg (1883-1931) it allows him to reiterate his opposition and to affirm not only that the color must regain its expressive function but also “reach the maximum emotional intensity beyond, far beyond the structural reality” [4].

The factual representation of architectural color had in fact long been desired by architects in professional practice. Many architects travelled with two cameras: one for shooting in black and white, and another to record colored architectural surfaces and interiors. One of these was Bruno Morassutti (1920-2008), who spent a long period at Taliesin West looking deeply at Frank

Lloyd Wright's color schemes. Morrassutti's visual legacy is only one of the many examples of color photography informing an understanding of architectural color in its historical contexts [5]. Konrad Gatz and Wilhelm O. Wallenfang's book *Color in Architecture: A Guide to Exterior Design* (1960), is a significant volume that makes the point of how color photography interpreted and transmitted architectural color¹ [6-8]. Translated into several languages, it has never been considered as a photo-book where the medium expressed the increasingly polychromatic nature of contemporary architecture.

3. Conclusions

The visual representation of architecture in color was more than an analytical tool; it had an important role in the historical development of our general knowledge and provided information on the character of modern architecture, helping to define a more rounded approach to architectural design.

The identity of a building becomes clear in an architect's choices of how material, texture, sheen, and color come together. Gatz and Wallenfang's photographs predate and challenge the now-standard notions of architectural visual identity that have been formed by more recent and candy-colored photography. Traditionally,

photography has always commodified buildings, transforming the newly built houses and their facades into objects of desire. Yet fifty years before their repurposing as a pastel fantasy, the city's modern buildings were pictured as optimistic symbols of urban life. These photographs depict the city as a humanist artefact of the modern world and deliver a more accurate understanding of the intentions of their creators. Today, they provide valuable information toward preservation efforts, elucidating, not only the details of the architectural physical appearance, but the poignant drama of the city's ambition as well.

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¹ Gatz and Wallenfang's book was published by Reinhold in New York and it had a French edition titled *La Couleur dans les Facades* published the same year by Eyrolles Editeur in

Paris. On the same subject see also: Gatz, K. (1956), Luckhardt K. (1959), and Taussig, M. 2006.



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