



7th International Meeting on Retouching of Cultural Heritage

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Book of Abstracts

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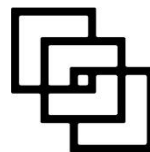


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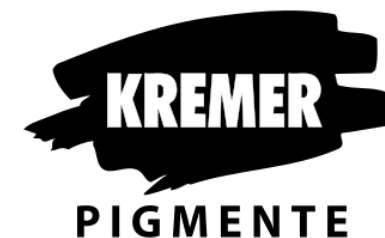
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October 12th, 2023



The Influence of Historical Interventions on Presentation of Ecclesiastical Art from the Croatian Adriatic Coast

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Abstract

On the Croatian Adriatic coast, the conservation profession is dealing with works of ecclesiastical art that have been repeatedly restored, reconstructed, repainted, or transformed due to damage caused by environmental conditions, the need to fit into a new setting and/or changes of stylistic and aesthetic preferences of the community and the owner. This paper illustrates various issues practitioners face when conserving artworks affected by turbulent past, overpainted, and subject to amateur interventions or historical conservation treatments, often resulting in visual discontinuity and illegibility of the artistic unity. On the example of two painted reliefs of Italian origin made of paper paste (carta pesta) and plaster and a panel painting (icon) depicting the Virgin and Child, materials and techniques applied throughout history are examined, focusing on aesthetic reevaluation in accordance with contemporary ethics elaborated by Salvador Muñoz Viñas. Contemporary criteria for the chromatic reintegration of a work of art differ from case to case. Implying the critical judgment of the conservator obliged to interpret the structural, visual and historical values of the work of art, based not only on scientific truths but also taking into account the function, value and meaning of the artwork in a wider context with regard to the people who are the end users. In this presentation, three different case studies outline valorisation of the totality of aesthetic, historical, and conservation changes with a review of different chromatic reintegration and presentation options.

Keywords:

Social Context of Artworks; Historical Interventions; Conservation Valorisation; Chromatic Reintegration; Visual Presentation.

Author Bio



Ivana Svedružić Šeparović graduated in art history and archaeology at the faculty of Philosophy on the University of Zagreb. From 1994 to 2017, she was employed as a senior advisor for movable cultural.

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Restoring, creating, or faking memories in architecture through colour

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Abstract

Colour is one of the more striking elements in architectural heritage, which can lead architects to broader design decisions beyond pigment.

The Santa Maria do Bouro Monastery was a renovation project by Eduardo Souto Moura, who found a ruin composed solely by raw granite walls.

His first idea was to restore the building's original features, with an image suggested by our architectural legacy: white, pink, or yellow shades. Excavations revealed blood-red mortar (and 1,2m meters long dark green glazed roof tiles) which was unexpected, to say the least.

He was faced with two options: to use lighter tones, in line with our expected image, but incurring a lie. Or using the original blood-red, creating an oddness unsupported by any memory. He chose a third option: to use the buildings' real memory, which was the ruin: he "used the existing stones to create a new building".

José Aguiar restored the "House of the Inquisition" in Monsaraz, a village with striking whitewashed walls, which were a likely reference to the building's original look. However, its original plaster had an ochre tone with brownish-coloured sgraffiti, (apparently) not uncommon in the village's past. He opted to recover it as reference to Monsaraz's forgotten image, which, when applied to a single building resulted in an element that stood out.

Both architects came across colour as a process of recovering, creating or even faking memories: a memory that no longer existed (the blood-red walls of Santa Maria do Bouro) was repudiated in favour of the existing collective memory (the ruin); a forgotten image (ochre) was recovered, despite Monsaraz's current image, which also results from history.

Can a "correct" historical period be used as a reference to our contemporaneity? Does our modernness defines history or an already forgotten past deserves to be superimposed to preserve its memory?

Keywords

Colour; Architecture; Heritage; Tradition; Mortar.

Author Bio



Pedro Fonseca Jorge is an Architect with a Master's in Architectural Heritage and a PhD in Minimum Housing (FAUP), and a Master's in Product Design and Visual Arts (ESAD.CR). He is currently a research fellow at LiDA (Research Laboratory in Design and Arts), at the School of Fine Arts and Design (ESAD.CR), where he also is an Assistant Teacher.

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The symbolism of the chromaticism in the floral ornamentation of the Rocks and other allegorical elements of the Corpus Christi festival in Valencia

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Abstract

The Corpus Christi festival, especially since its development and splendour reached during the Baroque, is nourished by numerous allegorical elements that help to exalt the devotional cult of the Eucharistic sacrament. The plastic expression of the festival, completely full of symbols, generates plenty of artistic representations around the processional race, in the form of triumphal arches, feigned perspectives, ephemeral architectures and many other biblical, allegorical or fantastic, provisional devices, elements and figurations.

Among all of them, the processional cars, popularly known as “las Rocas”, appear as particular and distinctive components in the city of Valencia. These horse-drawn ship-shaped rolling platforms, updated over the centuries, have been adorned with paintings, sculptures and scenography, made of various materials such as wood, fabric or cardboard. Its embellishment is projected with a powerful symbolic charge, insofar as it refers to different testamentary passages and hagiographic narratives.

In this context and in a traditional way, these processional cars, together with other representative elements, have been adorned with floral arrangements that have strictly resorted to a two-colour solution, composed of white and yellow. These colours are traditionally associated with Eucharistic worship and liturgy and coincide with the Papal flag of Vatican State. However, although generically they are associated with a Eucharistic meaning, in some cases they distort the symbolic and emblematic meaning of many elements that participate in the parade. In 2016, together with the conservative intervention carried out by the *Instituto de Restauración del Patrimonio* of the *Universitat Politècnica de*

València, this chromatic symbology was revised to design a new floral proposal in accordance with the meanings of each representational element, assimilating the meaning emblematic of colour with the motifs inherent to the figures, chariots and other allegorical elements.

In this context, floral decoration is an act of chromatic reintegration, as it improves the legibility of the images and their understanding from an iconographic point of view, where the colour of the flowers helps to enhance the associated meanings and symbolism.

Keywords

Colour Symbology; Floral Ornamentation; Corpus Christi; The Rocks; Festive Culture.

Author Bio



Antoni Colomina is a professor at the Department of Conservation and Restoration of Cultural Heritage, researcher at the Instituto de Restauración del Patrimonio and director of the Heritage and Art Collection Office of the Universitat Politècnica de València. His research is focused on the processes of cleaning pictorial surfaces; the creative industries at the service of the festivities and their specific values as intangible heritage; and the curative intervention and restoration of sculpture on organic support and contemporary art.

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A Study for the Visual Perception of Colour Reintegration Applications on Painted Surfaces in Turkey

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Abstract

Conservation of cultural heritage in Turkey was a little behind in terms of application process and scientific studies. Especially in many application studies, it is not possible to even discuss scientific conservation approaches and methods. In many conservation-restoration projects, using of innovative materials, economic conditions and scientific research are insufficient. Also, the background of experts and relevant commissions in the follow-up and control of the works may be insufficient. One of the problems caused by this inadequacy is the aesthetic step of the restoration in Turkey. In this study, it will be evaluated perception and knowledge of authorized persons in terms of chromatic reintegration approaches and techniques. The study group of the research consists of experts in the conservation of cultural heritage in Turkey. They will be selected various related governmental institutions except universities. Restoration aesthetic perception and knowledge of them will be measured in the context of mimetic, chromatic selection, neutral tint and undertone in chromatic reintegration applications. A web application will be designed for collecting data. Two different types of paintings and a monochrome surface will be used in this web application. The paintings are figurative and decorative. Participants will encounter two different question types consisting of images. One is in which they will prefer different chromatic reintegration techniques on the same missing part. The other is in which they can change the saturation, value and coldness by tools in order to reintegrate the missing parts of painted surface. The hue colour of the current missing part will be constant and we will ask them to change the tools related to saturation, value and coldness.

Keywords

Restoration Aesthetic Perception; Conservation Perception in Turkey; Chromatic Reintegration; Color Theory,

Author Bio



Ezgin Yetiş was born in Turkey and got a bachelor's degree in 2008 and master's degree in 2012 in the department of Traditional Turkish Arts at Dokuz Eylül University. He graduated proficiency in art at Gazi University in 2017 and took course on the conservation of murals in Accademia Di Belle Arti di Bari (Italy) in 2019. Since 2013, he has been done scientific studies on conservation of Ottoman wall paintings, colour integration, analytical and microscopic examinations of artworks. He works as an Assoc. Prof. in the Department of Conservation and Restoration of Artworks at Kastamonu University in Turkey.

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Wooden sculpture and retouching of gilding: sources, case studies and laboratory practice from the point of view of conservation students. The challenge towards a hopeful handbook?

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Abstract

As part of the teaching activities of the Laboratory\ of Wooden Sculpture, the students of the fourth year 2021-2022 of the School of Conservation and Restoration of the Urbino University have carried out a personal investigation on the question of retouching the gilding of wooden sculptures.

In order to have a correct and complete vision of the question, they started a search of sources: from historical-artistic literature, to case studies published in the bulletins of Italian restoration schools (Opificio delle Pietre Dure in Florence, Istituto Centrale del Restauro in Rome, etc.), to articles published in national and international conference proceedings.

All the information gathered has been selected and described on the basis of their experience, which, although still limited by their status as students, is already well structured thanks to the variety of courses taken, from art history to artistic techniques to laboratory practice on real works of various periods and origins, always supported by the experience of their professors.

Unlike what happens for conservation issues related to more "technical" aspects, such as cleaning or structural interventions, there is still no didactic

tool- in this case an all-encompassing handbook- which can help students in understanding founding principles, diffusion and interpretation of methodological and practical-applicative indications, useful for inpainting in general and for wooden sculpture in particular.

In addition, as is well known, retouching in Italy is a sensitive issue because of the strong links that still exist with the guidelines of Cesare Brandi's theory of restoration.

This contribution is intended to provide the basis for a first approach on how to structure classes for retouching on wooden sculpture, hoping to be of help in the drafting of a future handbook, usefully integrated by an interactive bibliography, hopefully online in order to be updated, enriched and used by all stakeholders.

Keywords

Inpainting; Gilding; Wooden Sculpture; Technical Art-History; Case-Studies; Methodology; Handbook; Conservation-Restoration Schools.

Author Bio



Alessandro Antonini is a conservator and restorer specialised in panels and canvas paintings, polychrome wood sculptures, modern and contemporary works of art. He studied Conservation and Restoration of the Cultural Heritage at the University of Urbino Carlo Bo with a master's thesis entitled "Study and treatment of the Madonna and Child, St. Joseph and St. Catherine of Alexandria" from the Municipal Library "F. Cini" of Osimo. Research on artistic technique for the purpose of reconstructing the production of A Veneto-workshop of the first half of the sixteenth century". Antonini completed an 8-month internship at the painting studio KIK-IRPA in Brussels and currently works as freelance conservator.

Removable panels: finding coherent solutions in restoring political and aesthetic values of the frescoed lunettes in the Hercules Gallery of the Prince's Palace of Monaco

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Abstract

In 2015, an extensive conservation and restoration campaign was launched by Prince Albert II, in the Hercules Gallery of the Prince's Palace of Monaco, due to major discoveries of Renaissance frescoes underneath several overpainted layers. Thirteen *lunettes* are situated between the vaulted ceilings and walls of the Hercules Gallery. The *lunettes*, depicting scenes from the life and labours of Hercules, are viewed from the Honourable Courtyard, an historically rich space where numerous public and diplomatic events take place. The Gallery is an integral feature of the guided tour of the state apartments, open to the public for seven months of the year.

The presumed origin of the frescoed wall paintings on the *lunettes* dates to the mid-16th century. Subsequently, the *lunettes* have been subjected to numerous interventions including a vast renovation and restoration campaign in the 19th century.

Today, seven *lunettes* contain a substantial amount of original fresco painting, mostly concentrated in the upper sections. The lower sections of six of these seven *lunettes*, with no underlying fragments of original fresco painting, contain retouched 19th century paintings.

In view of the context of the Hercules Gallery, maintaining two aesthetically incompatible painting styles, in various states of conservation, on the same *lunette* posed a dilemma. Analysis and debate of political, ethical, technical and aesthetic values resulted in a decision whereby cut-to-fit, aluminium panels were placed over the lower sections. Following intensive iconographic and anatomical studies, these removable supports

were then painted in the original, fresco style thereby completing the scene's narrative.

The mixing of technical solutions and the matching of the panelled scenes together with the ensemble of *lunettes* (16th and 19th centuries) was an aesthetic challenge which aimed for the harmonisation of the iconographic program of the Hercules cycle within the current, political context of the Palace.

Keywords

Wall Paintings; *Frescoes*; Removable Support; 16th Century; 19th Century; Aesthetic Values; Aluminium Panels; Iconography.

Authors Bio



Julia Greiner is a conservator specialising in archaeological and built heritage. In 2002, she obtained a BA(Hons) degree in Fine Arts at the University of Pretoria, South Africa before heading to Europe and continuing her studies. She holds an MSc degree in the conservation of archaeological underwater finds from the University of Southampton, UK and an MA degree in the conservation of cultural heritage from Sorbonne University, Paris 1, France. Since 2019, Julia has headed the conservation team of the fresco conservation project at the Prince's Palace of Monaco.

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Marion Jaulinè is a heritage painter and decorator. In 2010, she obtained an MA degree in Fine Arts from MO.CO.Esba in Montpellier, France followed by numerous diplomas such as the *Institute Van der Kelen* in Brussels, Belgium. Since 2019, she has been responsible for the artistic and cultural coordination of the fresco conservation project at the Prince's Palace of Monaco. She also teaches at the *Ecole d'Avignon*, France a resource centre for the conservation of built heritage.

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Infill and Retouching Approach on Paintings on Copper Support, 1790–2022: Materials and Techniques.

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Abstract

Little has been written about the restoration methods and materials used on painting on copper, when compared with easel paintings on other kind of substrates, namely canvas or wooden supports. Nevertheless, knowledge about historical and contemporary restoration treatments is important since vestiges may still be present within the work of art and should be taken into account when deciding about future conservation treatments. This presentation provides an overview over the infills and retouching materials applied on paintings on this metallic support from 1790 to our era. Thanks to the Painting on metallic support database developed by the author, covering the literature produced between 1600 to 2022, it has been possible to identify, to the date, the existence of at least 8 historical written sources between 1790 and 1900; and 64 contemporary sources produced between 1900 and 2022, covering treatment methods. The diversity of products and procedures applied vary from traditional materials based on carbonate calcium mixture with animal glue till synthetic resins, and from the use of brushes till carving heat pencils for application, respectively. Discussing the wide range of day-to-day practice over the last two hundred years not only will help conservators to make a contentiously decision on which materials and techniques could be applied during painting on copper restoration; but also, it will assist scientists to interpret correctly the data collected from these objects during scientific analyses.

Keywords

Painting on Copper; Infills; Retouching Materials; Restoration; Conservation.

Author Bio



Daniel Vega is an easel painting conservator. He has an associated degree in conservation and restoration of easel painting (IAO-FRESS) and a bachelor in Conservation and restoration with specialization in polychromed and gilding surfaces (ESAD-FRESS); a master in Conservation of easel painting (FCT-UNL) and a minor in History of Art (FCSH-UNL). His focus of interest is on the technique, conservation and restoration matters related to paintings on metallic support.

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Conservation Strategies for the Copy of Carlo Dolci's (1616-1686) *Madonna del Dito*: An Exploration of Materials and Methodology Applied in an Oil on Iron.

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Abstract

It is not typical for paintings restorers to deal with artworks created on metal surfaces. Among experts, it is well known that paintings on metal have appeared shortly after the development of oil painting and chalcography. The combination of these two techniques gave rise to painting on copper, which became popular from the 16th century. During this time, artists began to favour metal supports for their even surfaces and shimmering appearance, as well as their durability in terms of resistance to mould and wood-boring beetles. Afterwards, other types of metal supports were used, such as tin-lead alloys, brass and even steel. This presentation will focus on the case study of the restoration of a copy of Carlo Dolci's (1616-1686) *Madonna del Dito* on an iron plate. The object of interest, a portrait of the Madonna painted on a 26,3 × 20,6 cm oval tinned iron plate, is privately owned and presents an uncommon case. Based on experience and expertise of the Department of Conservation of Paintings and Polychrome Sculpture and Metal Conservation Studio at the Faculty of Fine Arts at Nicolaus Copernicus University in Toruń (Poland), materials and methods have been combined to enable a comprehensive restoration of the painting. The treatments in question relate to the conservation and restoration of metallic support as well as to the reconstruction of the painted surface. This presentation will discuss in detail the criteria, materials and methodologies used in the chromatic reintegration of the painting.

Keywords

Metal Support; Iron Support; Painting on Metal; Painting on Iron; Iron Plate; Tin Coating; Polychrome on Metal Restoration; Chromatic Reintegration.

Author Bio



Paula Karina Śwituszek is a PhD student at Doctoral School *Academia Artium Humaniorum* at Nicolaus Copernicus University in Toruń (Poland), having graduated from the Department of Arts with a specialization in the Restoration of Paintings and Polychrome Sculpture. In 2018, she successfully defended her thesis on the 17th-century Clock Face, which was written under the supervision of Joanna M. Arsyńska, PhD (artistic and conservation part) and Professor Justyna Olszewska-Świetlik (research and theoretical part). In 2022, she obtained a Bachelor's in Chemistry from NCU, Toruń. Her current research interests are focused on paintings created on metal supports.

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The Impact of Chromatic Reintegration on Decision-Making of an Act of Vandalism: The Conservation-Restoration Intervention on the Portrait of D. Maria Ermelinda Vianna.

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Abstract

The present investigation has as object of study a painting on canvas that portrays the benefactress D. Maria Ermelinda Vianna, which belongs to the Santa Casa da Misericórdia do Porto collection, that has the portrait tradition as a way of honouring the benefactors of the institution. Although numerous, this set of paintings is not usually attractive for its artistic quality, however, we believe that the analysis and intervention of one of these works is pertinent because it brings up unusual questions, but conducive to understand art as an object of social identity. Indeed, at some point in its history, the portrait of D. Maria Ermelinda suffered an act of vandalism, through mechanical incisions to the area of the figure face, the reason for an intervention of conservation-restoration.

With the purpose of comprehend this act as an integral element of the history of painting, through theoretical reflection with an impact on practice, the interventional procedures look to understand the work in its formal and documentary duality, therefore, vandalism was proposed as a record of belonging and of the social experience of the portrait. Through the critical analysis of the methodological possibilities, it was clear the definition of a process that respects the devolution of the structural stability and aesthetic reading, in consonance with the identification of this specific action, it is relevant to the trajectory of painting itself.

Therefore, the decision-making was inevitably a critical moment based on the reconstitution of the unity of the work, which is why the chromatic reintegration treatment acquired extreme importance in the demand for balance between the image and all the marks that make up its history, with

the purpose of integrating the act of vandalism materially and conceptually and guaranteeing the respect for the artistic and historical values inherent to this particular painting.

Keywords

Conservation-Restoration; Act of Vandalism; Artistic Value; Historical Value; Chromatic Reintegration.

Author Bio



Beatriz Helena Marques de Pinho graduated in History on the Universidade Federal do Rio de Janeiro and met the conservation and restoration area. After taking theoretical-practical courses, becomes assistant at the Ateliê de Conservação e Restauro de Obras de Arte - Marcela Tapia and joined the team at the enterprise NARB- Gestão de Coleções, which monitored private collections. In order to realize an academic formation, signed up on the degree in Arte- Conservação e Restauro at the Universidade Católica Portuguesa, continuing the studies on the master in Conservação e Restauro de Bens Culturais at the same institution.

Reintegration of Large-Scale Losses on a Black Monochrome Oil Painting by the Austrian Artist Arnulf Rainer.

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Abstract

This contribution describes the use of MSA Conservation Paints to integrate large-scale losses on a black monochrome oil painting by the Austrian artist Arnulf Rainer (*1929).

In 1994, the unvarnished oil painting *Übermalte Landschaft* (1960), 200 x 130 cm, was severely damaged by vandalism. During a break-in at Rainer's studio, the painting was defaced with an aggressive slogan in red oil paint. The letters covered nearly two thirds of the painted surface.

An earlier attempt to remove this overpaint, using strong solvents, resulted in severe damage of the underlying original paint layers and, in addition, left behind a strong negative relief (following the form of the Vandals lettering). Approximately one fifth of the paint surface was affected by abrasion, colour change, as well as substantial paint loss.

For the restoration (described here) in 2019, a comprehensive technical study and condition assessment of the painting was carried out at the Academy of Fine Arts Vienna. An artist interview provided further information regarding aesthetic intention and painting procedures. Significant effort was given to identify the most applicable retouching material and methodology.

The choice of retouching materials was limited by the fact that the oil-based paint used by the artist was partially sensitive to water. Golden MSA Conservation Paints were considered the most suitable material for retouching. The acrylic resin paints, soluble in aromatic hydrocarbons, can be removed with little risk to underlying oil paint layers. The consistency and appearance of the MSA paints not only adapted well to the

heterogeneous monochromatic dark surface of the art work, but also enabled the reconstruction of reduced impasto from the original brushwork.

Keywords

Retouching; MSA Conservation Paints; Monochrome; Vandalism; Unvarnished Painting; Oil Paint; Paint Losses; Water Sensitivity.

Author Bio



Stefanie Ludovicy is a paintings conservator working at the Liechtenstein Collection since 2022. She graduated with a Magister of Art in Conservation and Restoration of Paintings and Polychrome Sculptures from the Academy of Fine Arts Vienna in 2021. Her final thesis focuses on the painting technique and conservation of a painting by Arnulf Rainer from the 1960s. Presently she is engaged in a comprehensive project of conservation and technical research of the "Decius Mus" cycle by Peter Paul Rubens from the Liechtenstein Collection.

An Investigation on the Photochemical Stability of the Traditional Retouching Materials Used on Easel Paintings.

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Abstract

This paper illustrates the result of the experimental research on the photochemical stability of the most common retouching materials and coatings used in conservation, such as gouache colours, watercolours, varnish colours and varnishes. The principle of using stable materials is of utmost importance, especially to reintegrate monochromatic painting surfaces. This experimentation was carried out to identify the most stable to ageing and suitable materials to retouch and protect a big lacuna located in the sky of a painting on canvas. For this reason, all the materials were selected according to the final practical application: a limited range of colours and a specific refractive index of the varnishes were chosen. Two sets of mock-ups were prepared: the products (Windsor&Newton® designer gouache, Windsor&Newton® professional watercolours, Gamblin® Conservation Colours, Laropal® A81, Regal® varnish gloss, Regal® retouching varnish, Paraloid®B-72, Mastic) were tested both individually and combined with each other in multi-layered systems. The first set consisted in 16 small tests areas divided into 4 groups. Each group had 4 different retouching combination processes to mimic all the probable final aesthetic presentation phases, but each one was characterised by a different type of varnish. In the second mock-up set, on the contrary, every material was applied individually. Both sets underwent an accelerated ageing process into a solar-box for 1500 hours to compare their lightfastness. To document the changes, a diagnostic campaign was performed both before and after the solar-box ageing. Each mock-up was photographed in visible and ultraviolet light and analysed with a portable

spectrophotometer. This last tool allowed us to compare the colour changes (ΔE values) before and after the ageing process. A graphic elaboration of the photographic images was performed to underline the colour fading of some materials. The best performing materials were applied in the conservation treatment.

Keywords

Retouching Materials; Solar-Box Ageing; Watercolours; Gouache Colours; Varnish Colours; Varnish; Photochemical Stability; Lightfastness.

Author Bio



Gaia Caula is a conservator graduated in Conservation and Restoration of Cultural Heritage specialized in paintings on panel and canvas, wooden sculpture, furnishings and wooden structures, artefacts in synthetic materials worked, assembled and/or painted. She attended the five-years master's degree course offered by the University of Turin through the Centro Conservazione e Restauro "La Venaria Reale" and graduated in June 2022. During her degree thesis she deepened her knowledge about the different methodologies used in structural treatment on damaged fabric supports, especially the thread-by-thread tear mending method. Currently, she works at private

laboratories as freelancer conservator.

Methodology and Considerations for the Toning of Fills on a Norval Morrisseau Birch Bark Artwork.

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Abstract

An early artwork on birch bark by renowned Ojibway artist, Norval Morrisseau (1932-2007), in the collection of Kay-Nah-Chi-Wah-Nung Historical Centre (Rainy River First Nation) was treated for extensive structural issues at the Canadian Conservation Institute. Consisting of a representation of a bird created by peeling and painting the birch bark, it could not be displayed because the bark was curling and fractured, with detached pieces and significant loss. After the completion of treatment stages such as flattening the bark and mending fragments, the final step consisted of compensating losses using layers of Japanese paper followed by toning the top surface of these fills.

The goal of the toning was to complement the bird subject and birch bark substrate in a manner which met client expectations and was in accordance with conservation theory and ethics. The factors to consider in our decision-making process were the texture and colours of the bird and bark, loss of central parts of the subject of which there is no known record, paper composition of the fills, and large size of one of the fills.

The toning was carried out by airbrush as it produced the desired surface texture and allowed the seamless blending of subtle hue variations using one medium. Consulting with colleagues and researching approaches to compensation from different conservation specialties helped to identify toning options for the large fill. It was agreed with the client to use single hues individually matched to the surrounding colours for the smaller losses. Subtly varied brown hues were used for the large loss in order to complement both the bird and bark in the location of the fill. Although no further suggestion of the subject was added, the client intends to include

interpretive material alongside the artwork, which will enhance an understanding of its original appearance.

Keywords

Birch Bark; Airbrush; Paper Fills; Consultation,

Author Bio



Marie-Hélène Nadeau holds a Bachelor of Fine Arts in Painting and Drawing from Concordia University. In 2015, she completed a Master of Art Conservation (Paintings) from Queen's University. She completed contracts at Library and Archives Canada as a conservator in the paintings laboratory and interned at the Centre de conservation du Québec and with A.E. Henry Conservation. In 2016, she began a postgraduate internship in the fine arts laboratory at CCI, where she worked on the structural and surface restoration treatments of modern and traditional paintings. Marie-Hélène joined CCI in 2018 as conservator, specializing in the treatment of

paintings.

Wise and Safe Consumption of Retouching Paints in Some Early Iranian Wet-Collodion Glass Plate Negatives

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Abstract

This study presents a part of a research project on retouching wet Collodion and dry gelatine glass plate negatives from Golestan Palace photo archives in Tehran, Iran, dating from the 19th century. The collection belongs to Qajar era (1789-1925). This research has been tried to clarify the innovative and wise ways of 19th century Iranian photographers in reducing the consumption of substances, avoiding dangerous substances and using natural and local materials by examining what and how to use materials in the retouching of collodion glass plate negatives. In this research, four paint samples from different colours used in some retouched collodion glass plate negatives of the collection, were examined by means of, Fourier transform infrared (FTIR), and scanning electron microscopy-energy dispersive spectroscopy (SEM-EDX) to characterize and get the best understanding of the pigments to judge about their wise and safe consumption. Elemental and combinatorial analysis performed respectively with (SEM-EDS) and (FTIR) techniques revealed the presence of red and yellow ochre, Prussian blue and red Lead; also paint binders were found to be complex mixtures of natural resins or gums and some impurities. Considering the results, as well as techniques these materials have been used, the idea of wise selection and appropriate utilization of retouching materials by 19th century Iranian photographers been approved.

Keywords

Glass Plate Negative; Collodion; Retouching; Qajar.

Author Bio



Sahar Noohi is a chemist with a Master of Science degree in physical chemistry from Imam Khomeini International University, (Tehran, Iran). She has been working in Research Centre for Conservation of Cultural Relics (RCCCR) since 2007. Sahar Noohi is member of Material Science and Technology research group in RCCCR and works as a FTIR lab manager. She has expertise in FTIR analysis (material identification and studying deterioration processes), with special emphasis on photographic material. She has conducted several scientific projects, and done several consulting works in Golestan Palace photo archive (listed as UNESCO World Heritage), and Iranology Foundation library in Iran since 2015. She also has a book and papers as the main author in the field of historic photography.

Chromatic Reintegration as a Means of Dialogue Between Artist and Conservator: The Contemporary Art Sculpture "Murmurs of The Forest"

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Abstract

The conservation and restoration of contemporary art often involves conflict resolution and difficult decision making that is determined by the complexity of both the material and conceptual levels. On this last level, the artist's intention stands out, a fact which requires, as far as possible, that the conservator-restorer should undertake his intervention in a continuous dialogue with the author.

In line with this circumstance, this study presents the intervention on the sculpture "Murmurs of the forest" by Miguel Molina, belonging to the Museu Campus Escultòric (MUCAES) of the Universitat Politècnica de València (UPV) and in which the chromatic reintegration carried out, in connivance with the artist's own will, serve as a means of transforming the work itself.

This sculpture, in the form of a branched axe in bronze, has a vine growing from its base as a metaphor of transformation derived from the union of the concepts of life and death. "Murmurs of the Forest" is located on the Vera Campus (Valencia) and, in recent years, has suffered several acts of vandalism by the university community itself, which have resulted in the breakage of several parts of the work, as well as the total loss of the vine.

Due to these relentless acts and the particularities that shape the sculpture, an alternative is sought to ensure its preservation. In this way, in constant dialogue with the artist, a transformation of the piece is proposed through welding work and, subsequently, chromatic reintegration that integrates the welded areas. Likewise, Miguel Molina conceives this transformation of his work by extending the reintegration to other intact

areas of the sculpture so that they form part of the evolution of the sculpture and of the new meaning that emerges from this new creative act.

Consequently, in this particular case, the process of chromatic reintegration is at the service of the artist's intention, serving as a means of capturing the transformation of the work in accordance with the new criteria of artistic creation proposed by Miguel Molina.

Keywords

Chromatic Reintegration; Contemporary Art; Conservation and Restoration; Conservation and Restoration of Contemporary Sculpture; Chromatic Reintegration of Contemporary Sculpture; Chromatic Reintegration Methodology.

Author Bio



Beatriz Doménech has a PhD in Conservation and Restoration of Cultural Heritage from the Universitat Politècnica de València (UPV), she currently works as a conservator and restorer in the Heritage and Art Collection Office of the same university (UPV). In recent years she has actively participated in a large number of conservation and restoration projects in collaboration with the Instituto de Restauración del Patrimonio (IRP) of the UPV, as well as in national and international congresses and seminars. His research focuses on chromatic reintegration in easel painting, contributing, through articles and papers, different studies related especially to light sources and the interference they generate in the reintegration processes.

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Second time around: Re-treatment of a retouched painting on paperboard from Helena Rubinstein's miniature rooms

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Abstract

In 1968, the Tel Aviv Museum of Art was bequeathed seventeen miniature period rooms from the estate of Helena Rubinstein, a wealthy Jewish socialite and self-made cosmetics magnate. These miniature rooms were on continuous display until 2018, and in 2020 were removed from storage for a large-scale condition survey and treatment. Included in the miniature rooms are landscapes painted on mounted paperboard that can be seen through the windows of some of the rooms. One of the landscapes, depicting the Dutch countryside, suffered damage in the form of dark paint splashes at some point in its history. While the splashes had been retouched, the treatment was superficial and ultimately resulted in an unsightly appearance. The presentation details the conservation treatment of the painting which includes research, cleaning, removal of the poorly aged retouches, resurfacing losses, testing of pigment carriers, and chromatic reintegration with Regalrez 1094. Ethical considerations are discussed to highlight the role of deadlines in conservation decisions.

Keywords

Chromatic Reintegration; Retouching; Testing; Pigment Carriers; Regalrez 1094; Cleaning.

Author Bio



Roni Ben-Ami is an objects conservator at the Tel Aviv Museum of Art in Israel. They earned a master's in the Conservation of Archaeological and Museum Objects at Durham University in 2020 and have been working in the conservation field since 2016.

30 Years Later: Experimental Study of Alterations in Contemporary Iron Sculpture of The Seville's Universal Exhibition of 1992.

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Abstract

We have carried out an experimental study of iron alterations, through three contemporary sculptures that are part of the program 12 Sculptures of the Countries of the European Community, made for the Seville's Universal Exhibition in 1992. The three works by different authors, Brigitte Schnwaeake, Rui Chafes and Barbara Weil, are located in the Cartuja Garden, former Pavilion of the Arts, and are exposed to the external climatic conditions typical of the city of Seville. To this factor we must add the situation of abandonment to which they are exposed, this being a situation that enhances the poor state of conservation they present today.

We have established a study of corrosion levels in which we have made an evaluation of the behaviour of this metal, two protectives, Paraloid B72 and Inrcal 44, and their alterations as a result of exposure in different aqueous media. We have reproduced and observed test tubes in laboratories and in situ, reproducing the same climatic conditions to which the works exposed to the outside are subjected.

For the observation of corrosion, we have studied the surface morphology of the samples taken from the selected sculptures and specimens using a stereoscopic microscopy technique. With this we have tried to achieve a record of the different alterations, with the aim of making a comparison between the specimens and the selected contemporary iron works exposed abroad, without forgetting to value these works thirty years after the completion of this important Universal Exhibition, promoter of the name of Seville throughout the world and a social, cultural and economic transformation for the city of Seville. However, this image contrasts with the present, vestiges and ruins of that great Universal Exhibition of 1992.

Keywords

Iron, Rust; Contemporary Sculpture; External Climate Conditions; Alterations Study; Seville's Universal Exhibition.

Author Bio



Inés Flores Fernández is a Graduate in the Conservation and Restoration of Cultural Property and a Master's Degree in Architecture and Historical Heritage, both degrees from the University of Seville, as well as a researcher from the research group: Heritage Conservation, Methods and Techniques HUM-956 from the University of Seville. At the present time she has a contract of research in training to carry out her PhD thesis within the Doctoral Program in Art and Heritage by the University of Seville.

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Airbrush Techniques in Chromatic Reintegration

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Abstract

Airbrush techniques have been little discussed in the field of conservation and restoration. From the literature survey, one realizes that little is known about its use in this sector, except for the ceramic's speciality. Its acceptance by the conservation-restoration community is still low because it is considered a complex piece of equipment, and it is left aside in favour of more traditional approaches using the brush.

This investigation deals with the use of airbrushing as an alternative methodology to the brush in the chromatic reintegration of tiles.

The aim of this work is to explore the capacities of the instrument in reaching a distinguished chromatic reintegration, having as a starting point the *tratteggio* technique.

For accomplish this study, several mock-ups were prepared in order to evaluate the more suitable methodology to achieve the best results, referring their advantages and disadvantages. Subjects as airbrush tool, protection while airbrushing, paints and masking are explained.

With this study, we also want to propose a reflection on the applicability of airbrushing to the field of chromatic reintegration, presenting one of the many potentialities that there is to be explored. Despite the need to deepen the knowledge about its capabilities, the airbrush has characteristics that are promising in the context of contemporary art. The methodology presented here is an ongoing project, and some ideas and procedures are being developed.

Keywords

Airbrush; Differentiated Chromatic Reintegration; New Methodology; Airbrush Technique.

Author Bio



Margarida Boavida is a graduate in Sciences of Art and Heritage by the Faculty of Fine Arts of the University of Lisbon and currently a Master's student in Sciences of Conservation, Restoration, and Production of Contemporary Art at the same institution. Her master research regards the contribution of airbrushing techniques in simplifying the process of restoring the colour of lacunae.

Matching a better past: a new retouching approach on Chinese wooden plaque in early 20th century

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Abstract

Wooden plaques are among the most essential ornaments in Chinese traditional architectural space, such as family halls, government halls or Buddhist halls. By reading the written contents in wooden plaques, people could easily identify different functions where the plaques were hung. During the conservation practice on one wooden plaque from 1921 in the Chung Tai World Museum, the conservators had run over different approaches to match the unusual texture on the centre area of the plaque.

Unlike the commonly seen smooth surface, the finishing layer of the plaque in this case seems more like a sand-painting surface in dark red. In order to reach a better and uniformed visual performance, the conservator firstly tried the similar skill to traditional Makie finishing. However, in this case, the Makie practice did not produce satisfied adherence. Correspondingly, the conservator then turned to mix coloured quartz sands with different concentration of Paraloid B72 and Laropal®A81 respectively. Eventually, a relatively nice and accordant present has been obtained by mixing quartz sands and pigments in Laropal®A81 5~10% (w/v) in xylene, which were applying with spatula on target areas. This conservation practice, which seems to achieve both functional needs and aesthetic expression, allows the conservator to be more confident when treating other Chinese traditional furniture with lacquered or similar decorative layers.

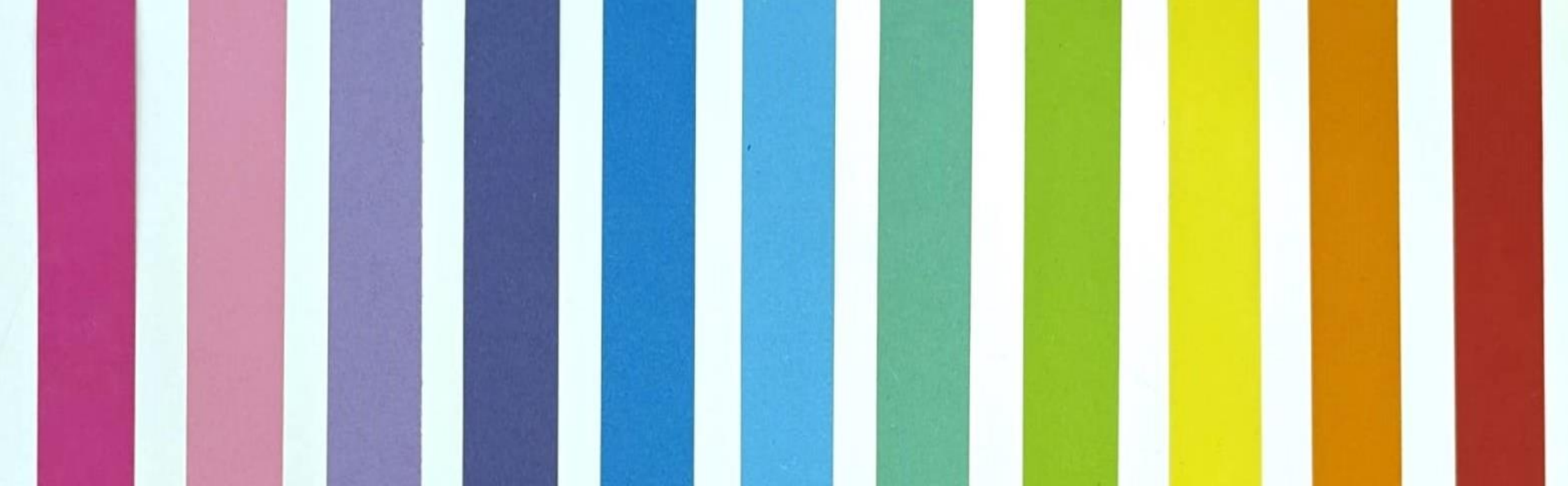
Keywords

Chinese Wooden Plaque; Sand-Painting Texture; Laropal®A81; Quartz Sands; Makie; Chung Tai World Museum.

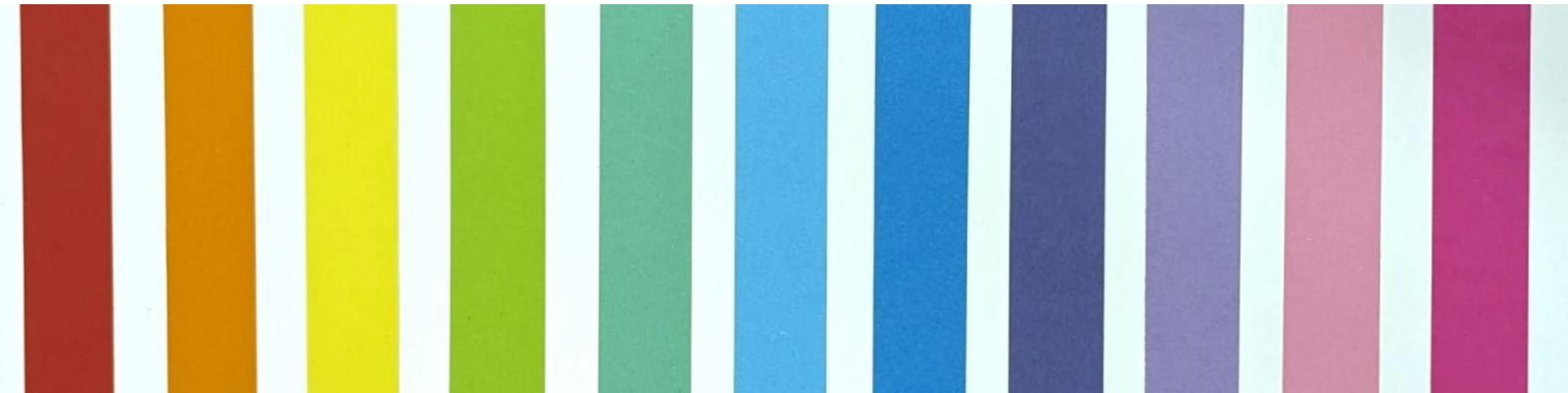
Author Bio



Chang Hsiao-Yun is a painting and wooden artifact conservator. After finishing her conservation Master's degree at Tainan National University of the Arts, in Taiwan, she worked for private conservation and restoration of presidential and vice-presidential artifacts at Academia Historica (2011-2015). Since 2016, she worked as a Sculpture Conservator-Restorer at the Chung Tai World Museum, responsible for the conservation and restoration of wooden Buddha statues and objects and participates in conserving large outdoor metal and stone artifacts.



October 13th, 2023



“Barson” by Victor Vasarely: Retouching of Contemporary Art on Paper-Silk Print

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Abstract

A short 10 minute video presents all performed conservation and restoration works on optical contemporary art on paper support "Barson" by Victor Vasarely from 1967. In order for the artwork to be presented to public, the final retouch should have been performed to the level that it is recognizable without disrupting the overall view of the artwork. Regarding that "Barson" is optical art, every redundant, wrong and excess amount of colour is visible on silk print paper support that is performed as a collage. Therefore, the retouching had to be done in two levels. First applied layer is in watercolour to cover all white cracks. Second applied layer was in dry pastel with which the three-dimensionality of colour was imitated. This type of retouching makes it possible to get as close as possible to the screen-printing technique of the original, but at the same time, it was the least visible and at the same time recognizable, which is required from the ethics of restoration.

Keywords

Silk Print Retouch; Contemporary Art; Paper Support; Combined Technique; Final Presentation; Op Art; Vasarely,

Author Bio



Majda Begić Jarić is currently employed as Head of department for Textiles, Paper and Leather at the Croatian Restoration Institute in Zagreb. In 1997, she graduated at "Istituto Arte Atriginato e Restauro" in Rome, specializing in the restoration of easel paintings and polychrome sculpture. In 2007 she obtained a Master's in Arts at the "Academy of Fine Arts" in Zagreb. She is specialized in the restoration of works of art on paper at the "Opificio Delle Pietre Dure", Firenze, Italy, with the financial support of the European Union Agency for Mobility and Programs through the Leonardo Da Vinci Mobility-Persons in the Labor Market (PLM) program under the Lifelong Learning Program and publishes professional articles in Portal and Peristyle. She lectures at many expert meetings regarding the restoration of works of art on paper in Croatia and abroad (Azerbaijan, Italy, Poland, Spain, France). She also mentors' students from France and Croatia studying paper restoration.

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Sound Reintegration: Audio Processing to Live the Experience of Primitive Recordings

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Abstract

The reintegration of old audio recordings through digital processing, to minimize noise, the effects of the degradation of the support or restore lost parts is a common technique among professionals in the audiovisual world and has been widely studied.

However, professionals in scientific, technological or ethnographic heritage museums face additional problems. When taking a historical tour of audio recording techniques, equipment and media, it is difficult to understand how those old recordings were like. Not all museums have primitive recordings, in other cases they do exist, but they remain on their supports because the equipment to reproduce them is not available, and, even in the cases in which both the supports and the equipment are available, their fragility makes not recommended to reproduce them continuously.

There are libraries with primitive audio recordings, but logically they have both catalogue and technology limitations. So, it is difficult for a museum to offer the experience of listening to an old audio recording to its visitors, even less to create new recordings with primitive techniques to compare, study or simply understand how the audio sounded like.

This paper describes the development and use of an online tool that allows sound reintegration of any digitized audio to make it sound like a primitive recording. The audio files are filtered and processed to emulate recordings made with different audio recording, thus reproducing devices, such as a phonograph, a gramophone, and a wire magnetophone. In addition, the sound reception with an old galena radio (the first radio

receivers), a Bakelite telephone or a morse code radiotelegraph is emulated, bringing the intangible and technological cultural heritage closer to new generations through this experience.

This application, developed by the Museum of Telecommunications History Vicente Miralles Segarra of the Polytechnic University of Valencia, is currently accessible online at <https://museotelecomvlc.webs.upv.es/demostradores-tecnologicos/>.

Keywords

Sound Reintegration; Audio Recording; Digital Audio Processing; Intangible Cultural Heritage; Technological Cultural Heritage; Museum Experience.

Author Bio



María Carmen Bachiller Martín has been a Telecommunications Engineer since 1996 and a PhD in Telecommunications since 2010 from the Polytechnic University of Valencia (UPV). She worked from 1997 to 2001 at the company ETRA I+D as an engineer for R&D projects. In 2001 she joined the Department of Communications of the UPV as an associate professor and is a full professor since 2011. She teaches Electromagnetism Theory. Her current research interests comprise the study of electromagnetism for communications and the technological heritage. He has participated in 43 research projects, teaching projects and technological heritage studies, as well as 3 exhibitions. She is co-author of 36 research articles, 70 conference publications, and one patent. She is currently the Curator of the Museum of Telecommunications History Vicente Miralles Segarra at the UPV.

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Digging up the past: chromatic reintegration of a buried wooden sculpture

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Abstract

During the master's degree classes in Conservation and Restoration of Sculpture, at the Polytechnic Institute of Tomar, an intervention was carried out on an image depicting Jesus as a Child (late 14th or early 15th century). The sculpture was found buried beneath an altarpiece during conservation works. Its state of degradation was very advanced, and both the support and polychromy were very fragile, with large areas of volumetric and polychrome losses.

The fragile state of the sculpture conditioned both the methodology and the materials applied and only after the stabilization of the paint layers and the support, it was possible to define the decision-making process. As the image was not intended for worship due to its condition, the need for a very extensive restoration intervention was not possible or even felt necessary, however, the aim was to give back some fullness to the artwork. For this reason, filling masses were only applied in the flesh areas in order to minimize the impact of the lacuna and to give some reading to the sculpture. The remaining areas, both in the support and the polychromy, were not reconstructed.

The flesh tones were retouched using a mimetic technique, with *Kremer*[®] pigments agglutinated in Laropal[®] A81. The choice of this material was related to the binder's high resistance to aging, resistance to yellowing as well as good coverage capacity and matte appearance. In the remaining areas, the traces of the ground layer were retouched with watercolour, mimicking the tone of the wood, in order to diminish the contrast between the two materials.

In reintegration the choices of techniques and materials are vast, being necessary to adapt the options to each situation. Although gaps can

interrupt the fluid interpretation of the artwork, and therefore prevent its understanding, chromatic reintegration does not aim to introduce a newer look into the artwork, but to maintain it as a complete unit, respecting its authenticity and history.

Keywords

Buried Sculpture; Wood; Losses; Retouching; Decision-Making Process.

Author Bio



Mafalda Maria concluded her degree in Conservation and Restoration in 2021, at Tomar Polytechnic Institute (Portugal), where she is currently doing her master's in Conservation and Restoration. Since 2020 she's been collaborating in multidisciplinary teams developing works of conservation and restoration on heritage buildings, tile panels, sculpture, wood and stone altarpieces, mural paintings, as well as paintings on wood and canvas. Recently she was a speaker at the IV Ibero-American Congress of Research in Conservation and Restoration, and at ConNext 2022 and ConNext2023.

The Restoration of St. Anthony Altarpiece from Sermoneta: Identification of Suitable Infilling Materials for the Gaps' Treatment in an Oil Painting on Slate.

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Abstract

The altarpiece of St. Anthony, painted by Girolamo and Tullio Siciolante in 1572, is an oil on slate, made of very thin slabs (1.5-2 cm) of considerable dimensions (~3,80 m².), preserved in the Sermoneta Castel (Italy), in an environment characterized by considerable thermo-hygrometric fluctuations. The pictorial layer shows several gaps and abrasions that largely compromise the original aesthetic features of the painting. Due to the particular technique of the artwork, the oil paint film is very thin, nevertheless the gaps in the paint film create many areas of unevenness that alter the original smoothness of the surface.

Usually, when dealing with an oil on slate, the chromatic reintegration of lacunas is carried out applying the colour directly on the stone support, but this approach does not consider the correct interpretation of the artwork's stratigraphy and does not eliminate the unevenness caused by the gaps, which alter the correct visual perception and aesthetic features of the image.

The aim of this work is to identify suitable materials for the grouting and reintegration of oil paintings on slate, considering the lack of specific studies on this topic. Different infilling materials have been tested in comparison with traditional ones, in order to evaluate:

- their stability through accelerated ageing by simulating daily, seasonal thermo-hygrometric conditions
- their adhesion to the slate substrate,
- their colorimetric stability
- their bioreceptivity
- their reversibility

Our experimental results allow to find a suitable infilling material to be applied in very thin layers without cracking, with a good adhesive power to the slate surface and good properties as a retouching substrate.

Keywords

Oil Paintings; Slate Support; Lacunas Reintegration; Infilling Material.

Author Bio



Virginia Lizzi is a graduating student at the Istituto Centrale per il Restauro in Rome, has been training since 2017 in conservation and restoration of stone materials and decorated surfaces of architecture. During her studies she has been involved in various educational and restoration projects, working on different materials. She also took part in some research studies, testing traditional restoration techniques in comparison with innovative methods and materials.

Essays on Retouching with Dry Techniques: Inverted Drawing.

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Abstract

This paper presents the results of a practice of retouching with dry techniques carried out with the students of the course of restoration of works on paper of the Degree in Conservation-Restoration of Cultural Heritage of the University of La Laguna. To this end, the studies carried out by Betty Edwards on *Learning to draw with the right side of the brain* are taken as a starting point. In her studies, she applies different techniques to learn to draw using different resources, such as the use of contours or negative spaces. In this case, we use the resource of inverted drawing as a method for retouching.

The practice is developed in three parts on a model to which different gaps or losses of supporting material have been made. In the first activity, the students must retouch by trying to imitate the missing lines of the shapes evoked. The second activity consists of working on the work in an inverted way. In this case, the pupils fit the missing parts of the drawing line by line, focusing on the shapes and isolating them from the whole. The third activity consists of carrying out the complete retouching of the missing parts, after analysing the forms of the two previous practices. The first results of this experiment indicate that the fact of retouching with the work inverted makes it possible to appreciate different details than those made in the reading direction. Also, the final retouching is more accurate in defining the shapes and details. Several examples of the results achieved will be shown.

Keywords

Dry Techniques; Inverted Drawing; Works on Paper; Right Brain.

Author Bio



Elisa Díaz-González is an Associate Professor in the Department of Fine Arts at the University of La Laguna. She teaches on the Bachelor's Degree in Conservation and Restoration of Cultural Heritage and on the Master's Degree in Use and Management of Cultural Heritage. Between 2008 and 2016 she was a professor at the University of Barcelona. She is director lab for the Service of Analysis and Documentation of Works of Art (SADOA) belonging to the General Service for Research Support (SEGAI) and coordinator of the CYAN (Science and Heritage) research group at the University of La Laguna. Her lines of research are based on image diagnosis systems and new trends in conservation-restoration of contemporary art and works on paper.

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Handcrafted and Self-Produced Dry Pastels as Reintegration Material of Wall Paintings.

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Abstract

This study aims to test the validity of handcrafted and self-produced dry pastels as reintegration material of insoluble stains, *lacunae* and abrasions of the pictorial film on dark plasters of mural paintings. These pastels have been compared with the materials typically used in the reintegration of the above-mentioned forms of decay, such as lime painting, varnish colours and commercial dry pastels. About the latter, we have chosen to analyse Gamblin Conservation Colours and Schmincke and Rembrandt pastels.

Moreover, the second purpose of this work was to make the reintegration easier recognizable from the original material, adding into the self-produced pastels mixture a fluorescent marker, visible to UV radiation.

As a first step, we have produced a wide range of handcrafted pastels, using three concentrations of gum tragacanth with various pigments and two fillers, starting from traditional recipes and refining them for restoration.

Then, we have applied the materials on fresco specimens to test their UV stability, adhesion, cohesion and reversibility. The effects of UV radiation exposure, in the climatic chamber with UV lamps (340 nm), T=50°C, RH=20%, have been monitored for 40 days with spectrophotometric investigations. The adhesion and cohesion properties have been analysed by scotch tape test, while reversibility with dry and aqueous methods removal tests.

These control methods have shown that the handcrafted and commercial pastels have good UV stability and reversibility, with high potential as a fast, easy and non-toxic reintegration method. Despite this, handcrafting pastels is a greater advantage to obtain tools with a pointed shape useful for details and with desired consistencies and colours.

Finally, we evaluated the use of Zinc Oxide as a marker of reintegration. This pigment has been useful to give an intense fluorescence to the handcrafted pastels, ensuring them easy recognition over the reinstated original material.

Keywords

Reintegration; Wall Paintings; Handcrafted Dry Pastels; Commercial Dry Pastels; Reversibility; UV Fluorescence; Zinc White.

Author Bio



Giulia Procopio completed a degree in "History and Conservation of Artistic and Archaeological Cultural Heritage" from RomaTre University in 2017 and recently graduated in "Conservation and Restoration of Cultural Heritage" from the Istituto Centrale per il Restauro (ICR) in Rome. With this degree she is qualified to work as a restorer of all works of art executed in natural and artificial stone (statues, wall paintings, stucco and mosaics).

Mixed Reintegration Techniques to Restore the Readability of Mid-20th Century Medical Posters

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Abstract

Reintegrating paper-based artworks is a complex matter in terms of reversibility and discernibility between original and added materials, so, decision-making criteria should be thoroughly evaluated before proceeding with such operations. The present case study consists of a group of three chromolithographic mid-20th-century Arabic medical posters belonging to the Museum of the Institute of Hygiene and Tropical Medicine (IHMT), Lisbon, which exhibited several damages compromising their appreciation and safe exhibition. Severe distortions, tears, losses, soiling, foxing and fungal stains were the main damages observed. Conservation treatment consisted of superficial cleaning, removal of residues of previous secondary supports (which were causing the distortions of the primary paper support), removal of self-adhesive tapes, washing and deacidification, flattening, stabilization of tears and filling of losses. Given the primary function of these posters and the distracting character of the losses, reintegration was considered a necessary approach. According to the area (plain colours or dotted areas characteristic of this printing technique), Japanese paper applied over the losses was reintegrated using stippling and cross-hatching techniques and permanent-coloured pencils, or brush application of liquid acrylic inks. Due to the glossy surface of these posters, different techniques were tested to mimic such gloss on the Japanese paper infillings, such as burnishing with a bone folder and applying a thin layer of methylcellulose. The final result was very satisfactory, achieving visual continuity in these objects and restoring their readability. The reintegration materials applied were of high colour fastness and are readily detectable by common examination methods (e.g., UV light, magnification, raking light).

Keywords

Medical Posters; Chromatic Reintegration; Chromolithography; Paper Conservation.

Author Bio



Raquel Christiano de Sousa has a degree in Conservation and Restoration from Instituto Politécnico de Tomar (2012), another degree in Visual Arts from Universidade de Évora (2008) and studied at the Fachhochschule Hannover (2007) under the ERASMUS programme. She interned at Atelier - Artbee, Conservation e Restauration d'Oeuvres d'Art, in Liège (2014) through the Eurodyssée programme, and at Atelier- Marta Bretão Conservação e Restauro de Obras de Arte in Terceira Island (2012) through the "Estagiar – L" programme. She was co-proposer in the Winning Proposal nº14 "Bibliotecas e Arquivos-por uma Preservação do Património", through the Participatory Budget of the Azores islands (2019). She has been working since 2015 in conservation and restoration at the Public Library and Regional Archive of Ponta Delgada and is currently a Master's student in Conservation and Restoration at the Faculty of Sciences and Technologies, NOVA University of Lisbon.

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Possibilities of Using YInMn-Blue in Chromatic Reintegration of Paintings: Color Properties and Lightfastness of Paint Layers Samples

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Abstract

The aim of presented issue, that is part of master's thesis, is to determine whether the YInMn-Blue blue pigment invented in 2009 can find a place on the conservation palette or even become a substitute material for other blue pigments used traditionally. Reported experimental study is focused on define the colour properties of paint layers containing selected blue pigments and changes of these properties due to the aging process – i.e. determination of their lightfastness. Samples of paint layers were made with paint containing several stable binders, used for inpainting. To prepare mock-ups the rules of ASTM standard for artistic materials were followed. Produced non-insulated paint layers and ones covered with varnish, were subjected to accelerate aging in the Xenotest® Alpha High Energy apparatus (Atlas, USA). Their colour characteristics were determined instrumentally with colorimetric measurements using the spheric spectrophotometer (SP-64, X-Rite, USA). Interpretation of obtained results followed with tests of application properties will allow to determine the possibility of using YInMn-Blue for retouch of paint layer losses in original paintings.

Keywords

YInMn-Blue; Blue Pigments; Lightfastness; Reintegration of Paintings; Retouching.

Author Bio



Mateusz Zyznowski is a final year student of Art Conservation-Restoration master's studies at Nicolaus Copernicus University in Toruń, Poland. His specialization is Conservation and Restoration of Paintings and Polychrome Sculpture. He is longtime interested in pigments properties, traditional and contemporary painting techniques and materials. He is also figurative realist painter.

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Analysis of Historical Retouching with Multi-Band Photography

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Abstract

Multiband images are part of the non-invasive documentation techniques that allow us to obtain information on how the works have been created, but also on their ageing or the retouching they have undergone throughout their history. The main objective of the present work is to document and characterise these retouches and chromatic reintegration using multiband techniques, especially UV fluorescence, but also through the comparison with other bands. To this end, previous research based on the specialised literature was carried out from a general and concise overview of the current methods and applications of these images in the area of conservation-restoration.

The study is based on the use of systems sensitive to a spectral range of approximately 360-1100 nm, together with different light sources and filters, to acquire a selection of technical images that provide the comparative method with different information about the works examined. We used a FujiFilm XT1-IR camera equipped with specific filters and the ARTIST multispectral system for detail acquisition. The resulting images were subsequently edited.

We will analyse, through different cases, the application of varnishes and repainting, compositional aspects that reveal the modification of the original image and material aspects, such as the identification of certain pigments, but always from the point of view of chromatic reintegration. Among the examples to be shown is the painting in which the only representation of Amaro Pargo (1678-1747) appears. Oral tradition and some literary accounts confuse his profession with that of a pirate, perhaps because of the contributions of some literary authors, more prone to fables

and bucolic-romantic invention than to the reality of the facts and documents of the time.

Keywords

Chromatic Reintegration; Visible Fluorescence, Multiband Analysis; Historical Retouchings.

Author Bio



Ania Rodríguez Maciel is a pre-doctoral FPI/FPU research staff at the Universidad de La Laguna (ULL) and PhD student in the Art and Humanities programme. Her main line of research deals with 16th century metalloacid inks and their degradation. She belongs to the research group Ciencia y Patrimonio (CYAN) and to the SADOA (Servicio de Análisis y Documentación de Obras de Arte) of the ULL. She is currently studying for a Master's degree in Diagnóstico del Estado de Conservación del Patrimonio Histórico at the Universidad Pablo de Olavide. Master in Uso y Gestión del Patrimonio Cultural and graduate in Conservación y Restauración de Bienes Culturales, at the ULL.

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The Use of Tylose® MH 300 in the Chromatic Reintegration of Matte Contemporary Pictorial Surfaces.

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Abstract

The chromatic reintegration of contemporary artworks poses countless challenges due to the artist's usage of new techniques and materials, many of which were not developed for artistic use. Among the main issues found at the retouching phase are the use of incompatible materials, the use of modern paints with intense saturation and finely ground pigments, the use of specific textures, the presence of colour fields and flat uniform surfaces, the absence or excess of gloss in the paints, and the choice of leaving the painting unvarnished. All these factors result in surfaces that are extremely susceptible to physical and chemical damage and that tend to present alterations and losses that interfere with the comprehension of the artworks. Therefore, matte contemporary pictorial surfaces demand an inpainting material that grants a range of visual possibilities while still being reversible, allowing for treatments in the future without causing damage to the original pictorial layer. To find such a material, several binders were prepared into samples, put through natural and accelerated aging tests, and evaluated for physical stability, chromatic and gloss variations, solubility and removability. One presented outstanding results: Tylose® MH 300 P2, a water-soluble non-ionic cellulose ether used as an adhesive for artworks on paper. Its results were noticeable: highly matte and stable, with positive results on chromatic stability. To validate the tests' results in a practical context, Tylose® was used as a retouching binder for two artworks presenting characteristic problems of matte-surfaced artworks. It proved to be greatly versatile, and easy to prepare and handle. Tylose® is an unusual material for chromatic reintegration, not present in the literature as such, and has shown to be adequate, obtaining excellent results in tests, chromatic adjustments and a matte finish. Thus, this research aims that

Tylose® becomes a viable alternative binder for retouching matte-surfaced artworks.

Keywords

Contemporary Artworks; Matte Surfaces; Chromatic Reintegration; Binder; Tylose® MH 300 P2; Reversibility.

Author Bio



Joana Diniz is an art conservator specialized in paintings and contemporary art conservation. She graduated in Conservation and Restoration at Universidade Federal do Rio de Janeiro and has recently received her MA in Conservation and Restoration of Cultural Heritage from Universidade Católica Portuguesa. Her research is focused on the inpainting of artworks, studying both traditional techniques and materials available as well as researching the application of different binders as inpaint media, their stability and reversibility. She has worked for institutions such as the Serralves Foundation, and currently works as a private conservator.

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Metamerism and Blue Retouching in Ceramic Conservation: New Approach of Computer Colour-Formulation and Application in the Conservation Studio.

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Abstract

Metamerism is a phenomenon where two surfaces match under one illuminant but mismatch when the light source changes. It is particularly prevalent in ceramic conservation as blue colours, widely used in XVIIth and XVIIIth century decorations, are more susceptible to form metameric pairs. Metamerism occurs due to differences between reflectance spectra of the ceramic cobalt blue and conservator's paint. The retouching appears purplish, negatively affecting the overall aesthetic of the restored ceramic. Since the early 2000s, several studies have explored the use of computer-colour formulation to calculate non-metameric recipes, with little practical outcomes for the conservator.

Instead of formulating a non-metameric mix of paints – which seemed impossible with available materials – we sought to formulate a colour that would match under a wide range of lighting conditions, aligning our efforts with prevailing lighting standards and practices in museums, galleries, and conservation workshops, including one LED light. Additionally, our method had to be easy to replicate by conservators worldwide. Without preconceptions about the pigments suitable to mix the right blue under different light conditions, we chose to formulate recipes using the whole range of Golden[®] acrylic paints.

In parallel, we studied twelve Delft earthenware plaques from the Royal Museum of Art and History in Brussels. Although the blues showed various appearances, we made the hypothesis that all blues would mostly have the same spectral properties and that the differences would mainly come from

the background's colour on which they are applied, hypothesis largely confirmed by colorimetric and spectral assessments. Building upon these observations, we tried to formulate a "universal Delft blue".

Our findings paved the way to a new methodology in investigating computer colour formulation technique, ultimately leading us to select eight pigments suitable for retouching Delft Blues. Finally, the method was effectively applied to retouch a Delft Urn.

Keywords

Metamerism; Retouching; Chromatic Reintegration; Colour-Matching; Computer Colour Formulation; Golden[®]; Delft Earthenware.

Author Bio



Gaëlle Silvant has a Master degree in conservation of ceramics and glass (2023) from La Cambre Brussels, Belgium. Her Master's thesis focus on chromatic reintegration of delft blue and white ceramics and the problem of metamerism. Her training was build up around several internships in museums such as the Musée National de la Céramique de Sèvres in Paris and the Royal Museum of Art and History in Brussels. She also had the opportunity to be an intern on a conservation mission in Egypt with IFAO, in Arc'Antique in Nantes, as well as in various private workshops.

Formulator's Emotionality

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Abstract

It is well known that the work of artists is characterized by emotion, and that the colours used influence the moods of those who observe a work. In the field of restoration, and paintings retouching in particular, the search for a shade intended to integrate a lacuna is not always exempt from these influences.

In everyday life, as in artistic production, the choice of certain colours over others is influenced by our tastes, our character and the mood of the moment: some colors are nice to us (moved from sympathy, from the Greek *sympátheia*, composed of *syn* 'with' and *pathos* 'sensation, emotion'), and others not. It is therefore logical to think that those who use colours choose them according to their sensations, thus influencing their work, the emotionality of artistic creation.

Today the composition of the colours and their production is no longer the responsibility of the artist, who usually does not know either the pigments or the binders he uses, but of new figures, the formulators, mistakenly considered technicians free from emotions; of course, this is not the case.

The formulator is not only concerned with the dosage of pigments and fillers, or the selection of binders, or rheological properties such as viscosity or spreadability, but also with the evaluation of the final result, and how this is influenced by the set of these parameters.

There is therefore also an emotional aspect in the choice of certain pigments and in the compilation of a range of colours that often remains hidden for end users. The examples that can be given are many and make us understand how there is also an emotionality of the formulator; The very

choice to produce certain colours and not others is also a matter of sympathy.

Keywords

Colour Production; Emotionality; Paint Maker; Formulator Chemist; Technician.



Author Bio

Leonardo Borgioli is a Chemist. His dissertation was on the study of microemulsions used in the cleaning of Masaccio's frescoes in the Cappella Brancacci, church of Carmine, Florence. He worked as a chemist researcher and is currently the technical-scientific manager for C.T.S., the main European company that provides products, equipment, and systems for art restoration. He holds a European patent on dispersed systems for paper deacidification, and he has published numerous articles and books on pigments and the use of polymers in conservation. He teaches Diagnostic Techniques

for Conservators and organizes seminars for restorers on chemistry applied to conservation.



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