

## 'Color Mania' and 'Chromatic Modernity': The polychrome experience of the moving image

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Only in recent years has a new awareness about the role of colour in film aesthetics arisen. Several historical accounts of colour in film have appeared, but in 2019 two volumes come as significant contributions to film and media studies: *Color Mania* and *Chromatic Modernity*.

*Color Mania: The Material of Color in Photography and Film* (Zurich: Lars Müller Publishers, 2019) started out as an exhibition curated by Nadine Wietlisbach and Eva Hielscher at the Fotomuseum in Winterthur, with a catalogue edited by Barbara Flueckiger in collaboration with the curators. If the exhibition has already been acclaimed in highly reputed reviews and can be acknowledged as a valuable tool for media literacy, the catalogue accomplishes the goals of deep research in visual culture, media archaeology, history of technology, and aesthetics. Moreover, as a catalogue of an extensive exhibition, the book collects a fascinating set of images, mainly film frames, photographed by Barbara Flueckiger (University of Zurich) and her collaborators throughout the years of their research. Since 2010, Flueckiger has pursued scientific research on film colors, making it accessible through the online database Timeline of Historical Film Colors (<https://filmcolors.org/>). It contains an encyclopaedia of the historical colour systems in cinema and photographic colour processes, offering a precious free tool for learning about material media history.

*Chromatic Modernity: Color, Cinema, and Media of the 1920s* (New York: Columbia University Press, 2019), a monograph by Sarah Street and Joshua Yumibe, focuses on the 1920s as a transitional decade between early cinema and the rise of Technicolor processes. The 1920s is not only the final decade of silent film, but also a time when cross-media relations converge, impacting cinema and consumer culture with technologies used in film, advertising,

fashion, and industrial design. Both authors have worked on the topic of film colour extensively; among many other works, Street wrote *Colour Films in Britain: The Negotiation of Innovation, 1900-55* (2012) and is co-editor of *The Colour Fantastic, Chromatic Worlds of Silent Cinema*, (2018, with Giovanna Fossati, Victoria Jackson, Bregt Lameris, Elif Rongen-Kaynakci, and Joshua Yumibe). Joshua Yumibe is author of *Moving Color: Early Film, Mass Culture, Modernism* (2012), co-author of *Fantasia of Color in Early Cinema* (2015, with Giovanna Fossati and Tom Gunning), and co-editor of the issue 'Cinema and Mid-Century Colour Culture' of the journal *Cinéma et Cie.* (2019, with Elena Gipponi).

The issue of colour tends to have been overlooked by media studies scholarship. Aristotle believed that rays of light allow chromatic vision. In his *Peri Chromaton*, he wrote that colours come from lightness and darkness. He also said that the human eye could see colour without light, while the trace of light without colour is visible in monochrome photographic images. For decades, films have been acknowledged as carriers of narrative and iconic values in a faded black-and-white world; Rudolf Arnheim insisted in the homogeneity and harmony of black-and-white pictures, whereas in colour films 'the possibility of discord arises'.<sup>[1]</sup> Even professionals and historians have long overlooked the issue of colour. For instance, in cinematheques films have been preserved by printing them onto a black-and-white stock, regardless of their hand-painted, tinted, or toned frames. Colour has been one of the most neglected features of media history. According to Richard Misek, black-and-white and colour have permeated and referenced each other throughout the history of cinema, resulting in a cognitive symbiosis, where 'cinematic colour emerged from black-and-white, defined itself in response to it, and has evolved in symbiosis with it'.<sup>[2]</sup> Therefore, colour has been a pivotal element in visual storytelling, in iconology and film aesthetics, and in the cultural reception of cinema. Both books hereby discussed acknowledge the key role that colour had in fashioning the visual culture of the twentieth century, also endorsing the influence of the material turn on how film and media studies integrate concepts of materiality into their research.



*Color Mania* offers an exciting overview of the broad topic of colour in film; on how the variety of materials and formats play a vital role in shaping the unique features that have characterised the look of films. The first chapter, by Eva Hielscher and Nadine Wietlisbach, refers to both the exhibition and publication. It aims to explain the choices behind the screenings (reminding the audience how cinematic art exists only in projection) and the installation work (which include dialogue with the contemporary artists involved in the exhibition, with an experimental and reflective approach). It also clarifies editorial work on the volume, which does not follow the layout of the exhibition, but rather deepened certain themes about materiality and aesthetics of colours that were investigated by the research group. In Flueckiger's comprehensive chapter 'Film Colors: Materiality, Technology, Aesthetics', the author explains her methodology and the theoretical structure that sustained her work. She specifically discusses the concept of *material aesthetics* as an interaction between material base and aesthetic appearance. Furthermore, she explains the concept of *faktura*, referring to 'the image structure that results from the interplay between various layers of film as a three-dimensional material aesthetic object' (p. 17). The last paragraph briefly refers to the conservation, restoration, and digitisation of the film colour heritage carried out by her research project [3] – that is, facing the challenge of transferring such heritage into the digital domain. According to Flueckiger, the technical and scientific work on colourimetric analyses requires strong historical knowledge and deep aesthetic research to help archives protect and preserve their multicolour collections.



Franziska Kunze, Eva Hielscher, Nadine Wietlisbach, and Mona Schubert have focused on the works of the contemporary artists involved in the exhibition (Dunja Evers, Alexandra Navratil, Raphael Hefti, and Barbara Kasten). These four chapters are structurally different from the other essays in the book, which are more history-oriented; the focus on these contemporary artists, all dealing with colour in different ways, creates interesting links between present and past and the impact of colour on different media and visual means.

The article by Thilo Koenig deepens the issue of colour in the history of photography, from the presence of colour in black-and-white photographs to the 19<sup>th</sup>-century photo chrome, by emphasising the forgotten role of colour in photography as part of its cultural history and aesthetics. The case study proposed by Eirik Frisvold Hanssen investigates the relationship between cinema and the history of science: the Norwegian explorer Roald Amundsen, who in the 1910s and 1920s used photography and movie cameras to represent his efforts and used applied colors to increase the visibility of the footage. For instance, many of Amundsen's photos and films were toned in yellow, as a reference to the yellowed glasses that explorers of the Poles used to wear; in iced landscapes, colour provided visibility and complemented discourses in national identity.

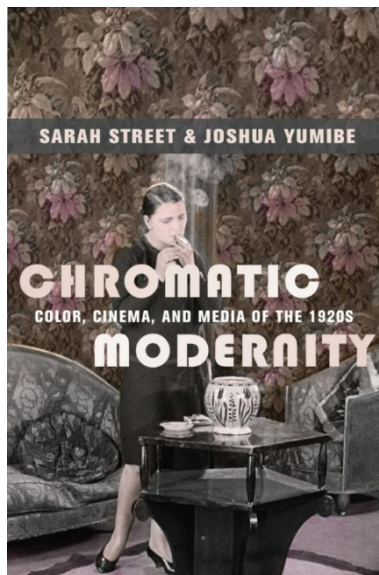
The issue of the construction of identity is also strong in Evelyn Echle's chapter, which describes the use of colour in the Orientalist archetypes that

populate the cinematic views of the Middle East and North Africa as perceived by the Western gaze. As Echle suggests, 'feature films did not focus on ethnographic authenticity but instead zeroed in on the emblematic function and generally accepted beauty of a treasure trove of forms that sought to evoke the purportedly magical and sensual aspects of the Orient through patterns and colors' (p. 101). Another very original work is 'Such (Dye-)Stuff as Dreams Are Made On' by Olivia Kristina Stutz, which analyses the cross-media interactions between photography, cinema, and the fashion industry that go from the use of synthetic dyestuffs to stencil-based colouring processes, parallel to silkscreen printing technologies. Moreover, Stutz, in her research, includes early fashion films with a media archaeology perspective, focusing on the role of colour in enhancing the optical and haptic qualities of the clothing's fabrics. The following chapter, by Ulrich Ruedel, focuses on the historical chemical processes for applied colours, i.e. tinting and toning,[4] mostly used in silent films but also continued sporadically into the sound era. Ruedel's research on chemistry demonstrates the survival of some cases of applied film colours in the decades after the introduction of sound technology.

Bregt Lameris' brilliant 'Images du Monde Visionnaire' focuses on a case study: the self-titled film by Éric Duvivier, realised with Henri Michaux (1963), describing the use of colours in representing cinematic hallucinations. Lameris also refers to various film techniques (such as Louis Dufay's *héliophore*, used in Henri-Georges Clouzot's *L'Enfer*), and formats, like the diverse film stock Kodachrome, Eastman Reversal and Gevachrome, which affected the look of several versions of the film in different ways (different brightness, or saturation of images). A chapter by Joëlle Kost addresses the aesthetics of the chromogenic multilayer color films of the 1970s, tied to the context of the emerging independent producers and the phenomenon of New Hollywood, with increasing low-key lighting styles made possible by the advancements in the sensitivity of film stock. Noemi Daugaard's 'Avant-gardist Colors in a Political Tug-of-War' dives into the history of Gasparcolor, employed in Germany during the 1930s, and appreciated for its brilliant colours by such avant-garde and animation filmmakers as Oskar Fischinger or Len Lye. After the rise of Nazism, Gasparcolor was progressively brought down, due to Béla Gaspar's Jewish descent; his patent was disputed since Agfa intended to use it without permission.

The subtractive colour processes Agfacolor and Technicolor are investigated by Michelle Beutler's chapter 'Standardizing Color Film'. The technical

history of the two industrial processes addresses issues of compatibility and quality of the systems, in light of the economic and ideological control of the international film industries, resulting in an aesthetic codification of ‘good taste’. Agfacolor is also the central topic of the chapter concerning the international circulation of the process, in competition with Kodak, written by Josephine Dickie. After 1945, its formula was revealed worldwide as the Allies confiscated the infrastructure and inspired the establishment of many successors in the international market, such as Ferrania, Fuji, Ansco, etc. The last chapter consists of an interview, with the technical team of the *FilmColors* project at the University of Zurich (David Pfluger, Giorgio Trumpy, and Martin Weiss). Chaired and edited by Simon Spiegel, the conversation underlines the team’s experimental work on digital humanities and their investigations on the chemical and physical features of film colours.



In *Chromatic Modernity* the authors trace the history of film colours throughout the 1920s. Films of the 1920s proved to be a pivotal age of urban modernity, with colour playing a key role in creating the culture of colour we grew to know over the course of the subsequent decades. This notion of culture stems from Pierre Bourdieu’s theories on the field of cultural production, which included the fields of science and social science, law and religion, as well as other expressive-aesthetic activities. Across cinema, according to

Street and Yumibe, colour represents other instances with historical, technological, aesthetic, and theoretical links. *Chromatic Modernity* interprets film in a comparative, intermedia approach including art, colour science, and industry. Thus, this book also attempts to come to grips with the current debates over colour's artistic, scientific, and educational significance.

The book opens with a quotation by the painter Fernand Léger: 'Objects, lights, the colours that used to be fixed and restrained have become alive and mobile.' Léger co-directed the film *Ballet mécanique* (1924) with Dudley Murphy; it is one of the truly groundbreaking works in experimental cinema, which shaped modern aesthetics in film, bringing it into the fold of the avant-garde and deconstructing the process of filmmaking itself. Colour in avant-garde art and cinema is tied to a subjective and non-indexical understanding of chromatic values, also establishing an alternative practice of spectatorship. The first chapter describes the colour standards in the workflow of the cinema industry, tracing the history of colour as a standardised commodity, moving from natural dyes to synthetic anilines, which is a chemical compound based on coal tar. In the 1920s, technical and aesthetic knowledge traces interesting intermedial and cross-field connections: colour becomes a hallmark of modernity and modernism, deeply tied to consumer culture, as well as film and mass media. In those years, colour values were also standardised through colourimetry guides, colour charts, and tinting books.

The second chapter looks at how colour is related to advertising and fashion: it analyses the role of cinema in the fashion world, and in promoting products in mass marketing campaigns, where colour played a vital role in influencing the public choice of dress as well as household furnishings, home décor, and commodity culture. Thus, the habits of mass consumption could be understood as expressions of a certain 'color consciousness' related to a chromatically rich media culture. The chapter 'Synthetic Dreams: Expanded Spaces of Cinema' describes a double goal of colour, referring both to the application of colours produced chemically as well as to the utopian concept of *Gesamtkunstwerk*, i.e. synthesis of artistic languages and medial forms. Such synthesis occurs also in the combination of high and low culture, avant-garde and vernacular forms, very typical of the 1920s experimental cinema as well as advertising and the press. The fourth chapter, on the 1920s avant-garde, perfectly addresses the complex discourses on the experimental nature of colour and the new media ecology experienced by various European artists, from those related to the Bauhaus to Fernand Léger, who used colour

as an innovative element in their media architectures. The chapter 'Chromatic Hybridity' argues that the 1920s were a crucial decade for film colour, demonstrating a wide variety of chromatic experimentation that ranged in methods and techniques.

Chromatic hybridity in the 1920s generally refers to a combination of colouring techniques and practices within a single film. The models created by colour as well as black and white do not necessarily differ in terms of use. Rather, they may actually converge within a modernist paradigm, devoted to an abstract sensibility, even in films presented as conventional entertainment. The last chapter describes the parallel advancements in film technology, resulting in the adoption of synchronised sound systems and optical sound printed alongside the film, as well as the transformation of color processes, from applied to photographic colours. Sound technology brought a broad set of changes to the cinema: it fundamentally changed the storytelling structures, thus affecting the cinematic experience by way of the technical and stylistic application of colour in the moving image. The sound transition in cinema occurred during a correlated transformation of colour culture, which affected the 1930s and the decades to follow. Thus, the book is built on the premise that all intertwined colour and cinema processes were part of a wide set of experiences in art, technology, industry, and commodity mass culture after the Second World War. This is described as 'chromatic modernity', revealing the role of colour cinema in forging new ways of seeing the modern world.

Both *Color Mania* and *Chromatic Modernity* were published in 2019, and both explore the changing uses and meanings of color in moving images, yet the two books are very different; *Color Mania*, being a book based on the catalogue of an exhibition, covers a wider historical time-frame, with a very rich and eclectic set of examples, references, and sources. The authors examine many different connections and exchanges between the media of photography and film, enhancing the discourse on material dimensions of photo and film colours. It also has a strong variety of materials and images created with different colour processes; therefore, it introduces readers to the history of colour photography and film. With this fascinating and far-reaching edited collection, as well as with the exhibition in Winterthur, the topic of film colours reached a broad audience, ensuring literacy and citizen engagement without losing academic accuracy. This collection displays essays on the cut-



ting edge of academic research on film colour: the volume's strength lies precisely in this big effort to share and clarify different varieties of colour experiences related to cinema and media history.

*Chromatic Modernity*, in contrast, proposes a deep focus on 1920s cinema and visual culture, interpreted through an intermedia perspective, and states that the changes and the phenomena that occurred in that decade have forged aesthetics on a symbolic and actual level. This monograph, in fact, illustrates how colour cinema in the 1920s was at the center of a net composed of entertainment, industry, and art. It also describes how the cinematic medium, as an educational tool, has dealt with technological and aesthetic revolutionary advancements within the same decade; it is more specific in its engagement with a certain time frame in film history and focuses very well on the complex multidisciplinary and plurimedia frameworks resulting in such novelties during the 1920s. Both books are innovative within scholarship on film colours; in fact, both intertwine technical depth with the cultural history of colour in a very nuanced interdisciplinary approach. *Color Mania* has the merit of a wider dissemination and engagement purpose, also thanks to its connection with the exhibition in Winterthur, and its broader set of topics, which have been made accessible by a variety of short chapters for a pluralist perspective on these themes; this frames an effective investigation of the different inflections of colour in film history, and it has the potential to become a core textbook for students of the subject. *Chromatic Modernity* is a clear-cut academic work on the role of the 1920s in European visual culture; it is an extensive and profoundly analytical book.

If it is true that original scholarship is currently opening its doors to colour-related issues, both books hereby analysed are indicative of the strong impact that colour has had on the aesthetics of cinema, and they do praiseworthy work in handling many of the challenges implied by this neglected topic in the context of film history and film theory. It is safe to say that both publications are able to provide reciprocal viewpoints and to open further thought-provoking discussion into this field of research.

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## References

- Arnheim, R. 'Remarks on Color Film' in *Film essays and criticism*. Madison: University of Wisconsin Press, 1997(orig. in 1935).
- Bourdieu, P. *The field of cultural production*. Cambridge: Polity Press, 1993.
- Dalle Vacche, A. and Price, B (eds). *Color, the film reader*, New York: Routledge, 2006.
- Misek, R. *Chromatic cinema: A history of screen color*. Chichester: Wiley Blackwell, 2010.

## Notes

- [1] Arnheim 1935, p. 54.
- [2] Misek 2010, p. 2.
- [3] Flueckiger's project about the influence of technological innovations on the aesthetics and narrative of films was the winner of an ERC Advanced Grant, as well as the recipient of funding from the Swiss National Science Foundation. This allowed her to establish an authoritative research team consisting of people with a wide range of expertise in chemistry, cultural history, digital humanities, film restoration, etc. Thus, the Zurich group has shown outstanding achievements in this field by investigating the relationship between technological processes and the aesthetics of film colour.
- [4] Tinting is a coloring process where the black-and-white film is immersed in a dye solution, staining the film emulsion, with the effect of a filtered colored light, whereas toning is a process of replacing the silver particles in the emulsion with colored, silver salts by means of chemicals, and unlike tinting it paints the darkest areas.