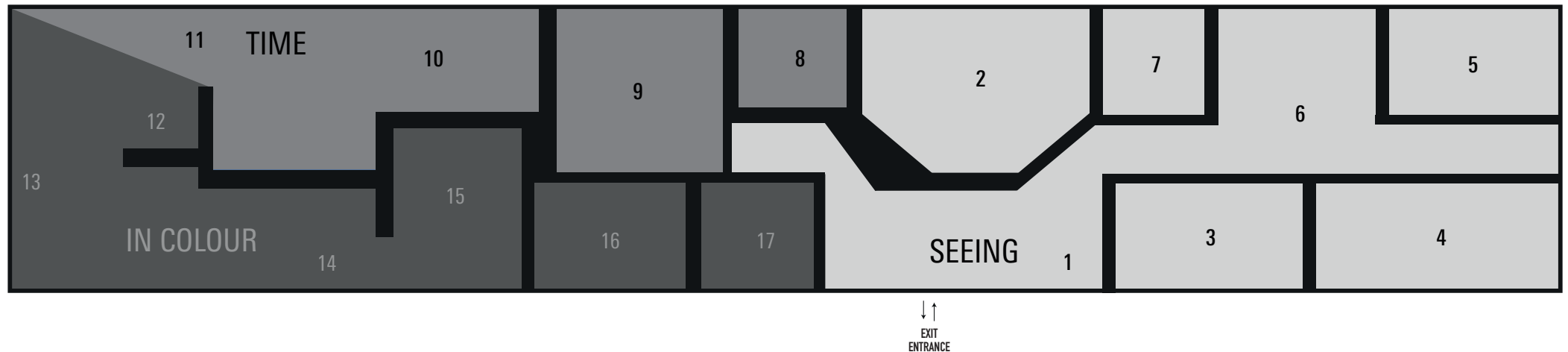




# SEEING TIME IN COLOUR

THE CHALLENGES OF PHOTOGRAPHY

## GALERIE 2



- 1 – The making of photography
- 2 – The play of shadows
- 3 – Mechanical reproduction
- 4 – Simply show photographs of them
- 5 – Conquering the invisible
- 6 – Conquering space
- 7 – Conquering the mountains
- 8 – Conquering the moment
- 9 – Conquering movement
- 10 – Dr Edgerton's stroboscopic flash
- 11 – Jumpology
- 12 – The conquest of colour
- 13 – The Archives de la Planète
- 14 – The future of photography
- 15 – Saul Leiter's colours
- 16 – Colour takes America by storm
- 17 – Gerhard Richter's photographic paintings

### Seeing time in colour. The challenges of photography

13.07 → 18.11.24

Curator: Sam Stourd 

The exhibition Seeing time in colour offers a rereading of the history of photography in the light of its greatest technical challenges, from its invention in the heart of the nineteenth century to today. Across three chapters—revelation, moment and colour—it brings together nearly 350 works that have left a lasting mark on its history, from the invention of the *camera obscura* (the inaugural form of the reproduced image) to contemporary manipulations of light fixed on sensitive supports. In an unprecedented temporal crossover, the exhibition focuses on four giants of photography: Constantin Brancusi, Harold Edgerton, Saul Leiter and Helen Levitt. They are all motivated by the same idea, that, in order to make an image, you first need to master the material challenges of its support. Contemporary works that reactivate old processes, from cyanotype to cibachrome, punctuate this historical survey. The exhibition's seventeen rooms retrace the great conquests of the image in the twentieth century, from the cosmos to the infinitely small; from the laws of physics and mechanics of the body to those of colour and its vibrations. Together, they tell the story of the shift from the register of sciences and technology to that of fine arts and aesthetics.

#### LISTEN!

New episode of the  
Center Pompidou-Metz  
podcast

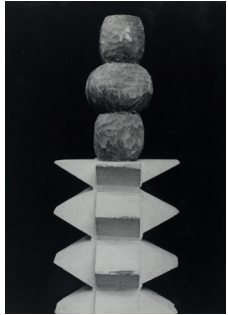


Do you have a question  
or just want to chat?  
Our mediators  
are at your disposal.

## SEEING

Revealing a subject in order to fix it in an image is one of the very first challenges of photography. The first section of this exhibition deals thus with the new visual fields that photography has conquered over the course of its history: art, landscape, the infinitely large or the invisible...

### FOCUS WORKS



a

a | Constantin Brancusi, *Exotic plant*, 1925

Constantin Brancusi's interest in photography is rooted in his ability to reveal what usually escapes the eye. From the 1920s onwards, he displays his studio sculptures as if on a stage, placing them on moving pedestals and arranging them through plays of light. By representing his works within their natural space, Brancusi frees the photograph of a work of art from its usual objectivity.



b

b | Gustave Le Gray, *Copy of the Mona Lisa*, Nineteenth century

Commissioned in 1851 by the Historical Monuments Commission to produce a photographic inventory of French monuments with a view to their restoration, Gustave Le Gray introduced the use of photography on a large scale. The *Copy of the Mona Lisa*, a photo of a drawing by Aimé Millet from 1848, provides an example of the artist's experimental manipulations and belongs to a suite of several tests made in different shades obtained by copper salt colouring processes.



c

c | NASA, *First Extravehicular Space Walk (Bruce McCandless II)*, 1984

On the 7th February 1984, American astronaut Bruce McCandless II undertook the first extravehicular space walk in history during the space mission STS-41-B. Thanks to high-tech photographic cameras manufactured by Kodak and adapted to the conditions of space, photography became the ideal tool to document space exploration and capture what is distant.

## TIME

Throughout its technical and artistic evolution, the question of time has become central to the history of photography. Instantaneity, exposure time and movement are all challenges to the temporal conquest of the photographic camera image.

### FOCUS WORKS



d

d | Hiroshi Sugimoto, *Kenosha Theater*, 2015

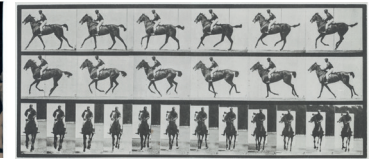
Since the birth of the snapshot, photography has been understood as the image of a frozen state of the past. With the series *Theatre* begun in 1978, Hiroshi Sugimoto undermines this belief by fixing the passage of time. Shot in old American cinemas and drive-ins using a method comprising extremely long exposure times, "Theatre" indicates a new conception of image duration by bringing together 170,000 images in a single photograph considered by him as: "ghosts resurrected by an excess of residual images".



e

e | Etienne-Jules Marey, *Pole Vault*, 1890

Among many subjects studied by physiologist Étienne-Jules Marey such as horses, sheep or gulls, the physical movement of athletic bodies occupies a prominent place. Made in 1890 at the Bois de Boulogne Physiological Station, the world's first filmmaking laboratory, this chronophotography records the successive poses of a pole vaulter taken a few microseconds apart on a fixed plate, giving an unprecedented impression of speed.



f

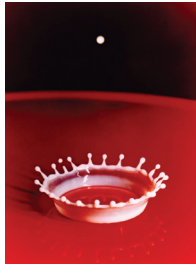
f | Eadweard Muybridge, *Galloping Horse*, 1887

In 1878, Eadweard Muybridge succeeded in capturing the gait of a galloping horse for the first time by means of twelve photographic cameras placed side by side. He demonstrated that the horse never has all four hoofs in the air at the same time during the extension phase. This discovery had a thunderbolt effect with artists of the time, right up to Edgar Degas, who incorporated the animal's positions into his sculptures.

## IN COLOUR

Since its task is to reproduce a subject, photography quickly turned its attention to adding colour into the images it produces. Numerous technical experiments have thus enabled us to play with the chromatic palette of reality and with plastic intentions.

### FOCUS WORKS



g

g | Harold Eugene Edgerton, *Milk Drop Coronet*, 1957

Selected by *Time* magazine in 2016 as among the hundred most influential images of all time, the drop of milk immortalized by Harold Edgerton in 1956 demonstrates the twentieth century's progress in the understanding of fluid mechanics. Thanks to the stroboscopic flash, the photographer continued research carried out in 1895 by physicist Arthur M. Worthington on the different stages of the dissolution of liquids.



h

h | Léon Busy for the "Archives of the Planet", *An actor and actress from the Saigon Theatre in stage costume in a garden*, Ha-Noi, Tonkin, Indochina, 1915

Between 1914 and 1921, Léon Busy produced the first colour photographs of Vietnam and Cambodia at the time of colonial Indochina, for the "Archives of the Planet" project. Sitting at the crossroads of nascent ethnology and human geography, these photographs illustrate Busy's mastery of the Autochrome process, characterized by an agglomeration of small dots of grainy colour.



i

i | Madame Yevonde, *John Gielgud as Richard II in Richard of Bordeaux*, 1933

Madame Yevonde upended the codes of colour photography by celebrating the emerging fashion and film industries in burlesque stagings. In 1932, she photographed British actor Sir Arthur John Gielgud playing *Richard II* for the hit play *Richard of Bordeaux* by novelist Gordon Daviot. Members of the royal family, writers and movie stars indulged in stagings that transgressed the archetypes of class and gender.



j

j | Helen Levitt, *N. Y.*, 1974

Recipient of a Guggenheim Fellowship in 1959 and 1960 to study colour photography techniques, Helen Levitt stands out for her unique vision of New York's bustling life. Her series of street photographs from the 1970s offers a singular testimony of the modern United States, placing her in the legacy of documentary photography concerned with translating the country's social reality, notably practised by Walker Evans.

## TIMELINE

- 1839 Louis Daguerre invents the daguerreotype, a photographic process that makes it possible to record an image obtained in a darkroom on a silver plate sensitized to iodine vapour.
- 1841 William Henry Fox Talbot invents the calotype, a process at the origin of modern analogue photography, which makes it possible to produce multiple prints of the same image thanks to the use of a negative on paper.
- 1851 Frederick Scott Archer develops the wet collodion process wherein a glass plate sensitized with a saline solution makes it possible to obtain extremely fine images by means of considerably reduced exposure times.
- 1866 Publication of the first treatise on photography applied to micrographic research. Laure Albin Guillot will become a pioneering figure in the 1930s through her artistic photographic practice.
- 1869 Louis Ducos du Hauron invents trichromy, one of the very first colour photography techniques based on the superposition of three pigmented negatives in yellow, red and blue.
- 1882 Étienne-Jules Marey invents chronophotography, a method that records the successive phases of moving bodies on a single fixed plate.
- 1891 Gabriel Lippmann develops interference photography, a spectral imaging technique that allows colours to be fixed on photosensitive plates without resorting to the use of dyes. This discovery earned him a Nobel Prize in 1908.
- 1895 Wilhelm Röntgen discovers the X-ray, a form of electromagnetic radiation that can pass through solid bodies. Its application is initially reserved for medicine before becoming the subject of artistic experimentation.
- 1903 The Lumière brothers invent the Autochrome process, the first industrial colour photography technique that used glass plates sprinkled with millions of microscopic particles of potato starch grains, tinted beforehand, in green, purple and orange.
- 1926 Harold Edgerton develops the stroboscopic flash, an electronic device that emits a powerful intermittent light source to the nearest millionth of a second.
- 1928 Douglas Arthur Spencer develops Vivex, a colour technique allowing three monochrome shots to be taken simultaneously using a photographic camera, rather than taking three successive shots. Photographer Madame Yevonde is one of its most notable users, as is Man Ray.
- 1946-1970 The dye-transfer process or "dye transfer" is one of the most widely used techniques in colour photography. It was used by New York School photographers for its sharp rendering and brilliant colours.
- 1991 Invention of the first digital photographic camera.

a | Constantin Brancusi, *Plante exotique (detail)*, 1925 Gelatin-silver print, 39,9 x 29,9 cm Collection Centre Pompidou, Paris Musée national d'art moderne - Centre de création industrielle 647 © Succession Brancusi - Adagp, Paris 2024

b | Gustave Le Gray, *Copie de La Joconde, XIX<sup>e</sup>*, Positive monochrome on paper, 19 x 28,6 cm Paris, musée Gustave Moreau Photo © GrandPalaisRmn / René-Gabriel Ojeda

c | NASA, *Première sortie extravéhiculaire non attaché (Bruce McCandless II)*, 1984 Vintage chromogenic print on paper «This Paper Manufactured by Kodak», 33,6 x 26 cm Paris, collection Jean-Fabien G. Phinera

d | Hiroshi Sugimoto, *Kenosha Theater*, Kenosha, 2015 Gelatin-silver print 119,4 x 149,2 cm 47 x 58 3/4 in Framed: 154,3 x 182,2 cm Framed: 60 3/4 x 71 3/4 in (SUG150001) © Hiroshi Sugimoto; Courtesy Lisson Gallery.

e | Étienne-Jules Marey, *Saut à la perche*, 1890, Print of a chronophotograph stuck on an annotated cardboard plate, 46,5 x 61,5 cm Paris, Collège de France, Archives, 55.1.55

f | Eadweard Muybridge, *Cheval au galop*, 1887 Photomechanical proof (gravure) 18 x 41,5 cm Paris, Musée d'Orsay, PHO 1983 165 160 22 © Musée d'Orsay, Dist. RMN-Grand Palais / Patrice Schmid

g | Harold Edgerton, *Milk Drop Coronet*, 1957 Collection Arlette et Gus Kayafas © Harold Edgerton/MIT, courtesy Palm Press, Inc., from the Kayafas Collection © 2010 MIT. Courtesy of MIT Museum.

h | Léon Busy pour «Les Archives de la Planète» *Un acteur et une actrice du Théâtre Saïgonnais, en costume de scène, dans un jardin, Ha-Noï, Tonkin, Indochine*, 1915 Facsimile from an original autochrome plate, 12 x 9 cm, Musée départemental Albert-Kahn, Département des Hauts-de-Seine, A7289

i | Madame Yevonde, *John Gielgud as Richard II in "Richard of Bordeaux"*, 1933.

j | Helen Levitt, *N.Y.*, 1971 Dye-transfer, 31,8 x 43,2 cm Cologne, Galerie Thomas Zander © Film Documents LLC Courtesy Thomas Zander, Cologne

## CONTEST GAME

Scan the QR code to win 2 tickets for the "The world in color" conference

Draw on October 31, 2024



# VISITORS INFORMATION

## OPENING HOURS

Every day, except Tuesdays and 1st May

## SCHEDULE

1st november to 31 march

Monday > sunday: 10-18:00

1st april to 31 october

Monday > thursday: 10-18:00

Friday > sunday: 10-19:00

## TICKETS

On sale at desks and on-site at Centre Pompidou-Metz as well as from resellers

Information

Tél. : +33 (0)3 87 15 39 39 (from 9:00

to 12:00 and from 14:00 to 17:00)

Mél: billetterie@centrepompidou-metz.fr

## PASS-M SOLO, DUO and PASS-M Jeune

A full year of cultural events and unlimited access to exhibitions

## GROUP RESERVATIONS

Tél. : +33 (0)3 87 15 39 39 (from 9:00

to 12:00 and from 14:00 to 17:00)

Mél: billetterie@centrepompidou-metz.fr

## HANDICAP-ACCESSIBLE

Information  
accessibilite@centre  
pompidou-metz.fr

## Centre Pompidou-Metz

1, parvis des Droits-de-l'Homme  
F-57020 Metz | +33 (0)3 87 15 39 39  
contact@centrepompidou-metz.fr

[centrepompidou-metz.fr](http://centrepompidou-metz.fr)



Members of Etablissement Public de Coopération Culturelle



Founding patron



Media partners

