





#### Editorial • page 3

#### Exhibitions:

Jenny Robinson, Mario Avati - Académie des Beaux-Arts Printmaking Prize

Annie Leibovitz, Académie des Beaux-Arts - William Klein Photography Prize

Henri Ciriani, Académie des Beaux-Arts Architecture Grand Prix (Charles Abella Prize)

#### Exhibiting under the Coupole

Fabrice Hyber, Bernard Desmoulin, Jean-Michel Othoniel, Blanca Li, Georg Baselitz, Pierre Collin

#### News

The Académie des Beaux-Arts' solemn autumn opening session

The five Academies' autumn opening session

«Concerts d'un fauteuil»: Laurent Petitgirard, Édith Canat de Chizy

• pages 5 to 19

#### Dossier:

The Eiffel Tower in all its colours

"The three-hundred-metre tower" by Bertrand Lemoine

**"Eiffel, a portrait without the tower"** by Jean-François Belhoste

"The Eiffel Tower, a history of colour" by Pierre-Antoine Gatier

"Lights in the City of Light" by Francis Rambert

"The Tower and the Arc" by Pascal Ory

"The Eiffel Tower's 20th campaign: an unprecedented technical and human challenge" by Patrick Branco Ruivo

"The Eiffel Tower in art" by Lydia Harambourg

"Filming the Eiffel Tower", interview with Simon Brook

"About the film Eiffel" by Jean-François Belhoste

"The photographer's Eiffel Tower" by Bernard Perrine

• pages 20 to 52

#### News:

Tribute: Guy de Rougemont

Sebastião Salgado, Praemium Imperiale

**Decentralized session in Arles** 

Exhibition: Musée Marmottan Monet

"Julie Manet, the Impressionist memory"

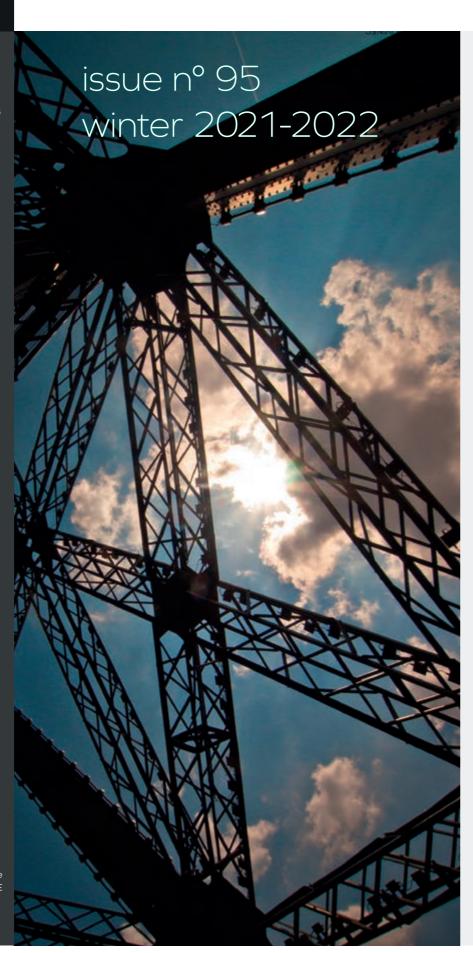
#### **Elections**

• pages 53-55

## The Academicians

• page 56

Opposite: the Eiffel Tower's structure Photo credit: Emeric Livinec / SETE



# **Editorial**

## Audacity, ever more audacity...

To secure lasting fame or become a city's or country's symbol, it is not enough for a building to be the world's tallest, largest, or most expensive.

There will always be a new, taller, larger, and more expensive building; the power of a work of architecture does not lie in such prosaic considerations.

Audacity, originality, and poetry; the architectural gesture and the building's appropriateness in a city or a landscape are far more essential than the parameters of so-called records, which will inevitably become outdated.

At a time when scientific progress is met with suspicion and new technologies with doubt, when scientists are constantly challenged, it seems that the Eiffel Tower is seen above all as a representation of human genius, precisely because it embodies a dream that spawned technical prowess, rather than the other way around.

Yet this extraordinary skyward momentum stemming from the building's formal purity was also able to elicit such fascination owing to the open space surrounding it where, until recently, children ran around among the ice-cream vendors.

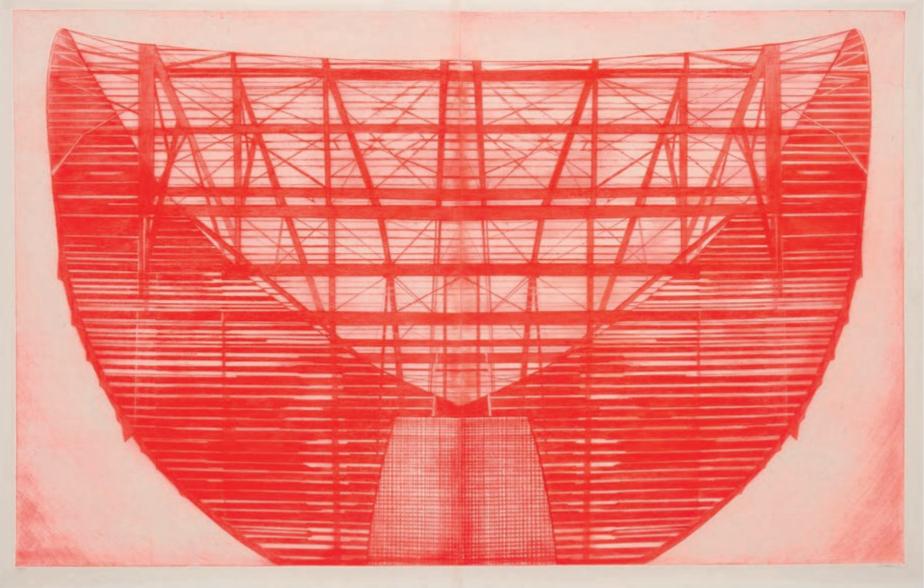
Drastic security standards have unfortunately become unavoidable, and have turned the site into a security space resembling an airport's visa control area. Beyond frustrating, this is totally antinomic to the feeling of freedom that the Eiffel Tower generates.

I would like to extend my gratitude to all the contributors to the dossier that we have chosen to devote to this masterpiece born of audacity, imagination, and courage.

### Laurent Petitgirard

Composer, conductor,

Permanent Secretary of the Académie des Beaux-Arts







Centre: Cornerstone, 2016, drypoint on Gampi paper, 101 x 152 cm.

Opposite: view of the exhibition, Pavillon Comtesse de Caen. Photo credit: Juliette Agnel  $\,$ 





## Pavillon Comtesse de Caen - Palais de l'Institut de France

# JENNY ROBINSON MARIO AVATI - ACADÉMIE DES BEAUX-ARTS PRINTMAKING PRIZE

From 9 September to 17 October 2021, Jenny Robinson, the 2019 winner of the Mario Avati - Académie des Beaux-Arts Printmaking Prize, presented a selection of her major works at the Palais de l'Institut de France's Pavillon Comtesse de Caen.

enny Robinson was born in the UK in 1957, grew up in the Far East, and studied in England at the West Surrey College of Art and Design. She draws inspiration from the places where she has lived, and through her oeuvre she reinterprets the contemporary urban space on a human scale. Through these architectures, characterized by their monumental dimensions and an openwork structure, she evokes two contradictory notions: fragility and ephemerality on the one hand, solidity and durability on the other. She sees the same type of contrast between the lightweight, diaphanous Japanese paper on which she works, and the metal architecture she represents. Everything in her approach aims to bring these opposing notions together; they are the prism through which she interprets reality and her work. These images are a first-person record of a carefully constructed, temporary place at a fleeting moment in time. In a single image, Jenny Robinson often depicts the entire chronology of a structure and, by extension, that of the people who built it, used it, and will dismantle it – our past, present, and potential future. She has taught printmaking at the Kala Art Institute in Berkeley, the Institute of Contemporary Art in San Jose, the San Francisco Book Center, and the University of Chico. A lifelong traveller, she has lived and worked between London, San Francisco, and Europe for the past twenty years.

academiedesbeauxarts.fr





Above: Permanent Secretary Laurent Petitgirard and member of the Printmaking section Érik Desmazières next to the winner, Jenny Robinson.

Jenny Robinson and member of the Printmaking section Astrid de la Forest.

Photo credit: Juliette Agnel

#### Pavillon Comtesse de Caen - Palais de l'Institut de France

# ANNIE LEIBOVITZ ACADÉMIE DES BEAUX-ARTS - WILLIAM KLEIN PHOTOGRAPHY PRIZE

The Académie des Beaux-Arts – William Klein Photography Prize was created in 2019 by the Académie des Beaux-Arts, with support from the Chengdu Contemporary Image Museum, as a tribute to the work of photographer, painter, visual artist, graphic designer, and documentary, advertising, and fiction film director William Klein. In 2021, it was awarded to the American photographer Annie Leibovitz, who presented a selection of her works at the Pavillon Comtesse de Caen, from 29 October to 5 December 2021.

or her exhibition at the Académie des Beaux-Arts, Annie Leibovitz selected more than 200 images, spanning five decades of work during which she developed the conceptual and theatrical style for which she is famous. Those images range from her early days as a photographer – when she was a student at the San Francisco Art Institute and used black and white film – to her recent works in colour.

The selection of subjects shows just how eminent she is as a chronicler of our times. She has covered the political and cultural upheavals of the 1970s, documented the siege of Sarajevo, and portrayed thousands of artists, writers, dancers, actors, musicians and political leaders. Her photographs also feature her friends and family, and the intimacy found in this aspect of her work more broadly extends to her portraits overall. The images presented at the Académie were clustered on grids, thus highlighting the interweaving relationships between works that emerge within such a vast, varied, and singular body of work.



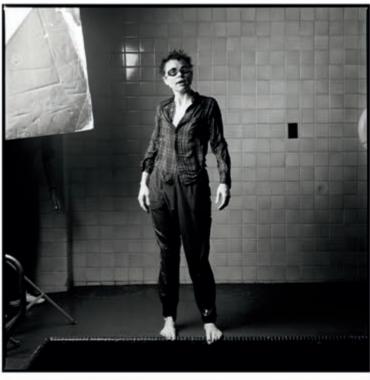




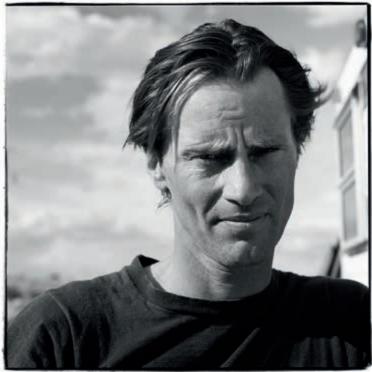
Annie Leibovitz was born in 1949 in Waterbury, Connecticut, and began her career as a photojournalist for *Rolling Stone* magazine in 1970, while she was still a student at the San Francisco Art Institute. Since then, her photographs have been a staple of the covers of various magazines. Her extensive and original work includes some of the most famous portraits of our time. Her first major work was a commission for a cover featuring John Lennon. Within ten years she had established herself as a savvy documentarian of the social landscape, with 142 covers and dozens of photo essays under her belt – including her accounts of Richard Nixon's resignation and the Rolling Stones' 1975 tour. She joined the staff of the new *Vanity Fair* in 1983, and began working regularly for *Vogue* in the late 1980s. Several collections of her work have been published, and her last book, *Wonderland*, was published by Phaidon in October 2021. Exhibitions of her work have been held at museums and galleries around the world, including the National Portrait Gallery and Corcoran Gallery in Washington, D.C., the International Center of Photography in New York, the Brooklyn Museum, the Stedelijk Museum in Amsterdam, the *Maison Européenne de la Photographie* in Paris, the National Portrait Gallery in London, the State Hermitage Museum in St. Petersburg, and the Pushkin State Museum of Fine Arts in Moscow.

 ${\it academie des beauxarts.} fr$ 











#### Above

Jim Carroll and his parents, New York City, 1980 | Laurie Anderson, New York City, 1982 | Peter Brook, Paris, 1981 | Sam Shepard, Santa Fe, New Mexico, 1984

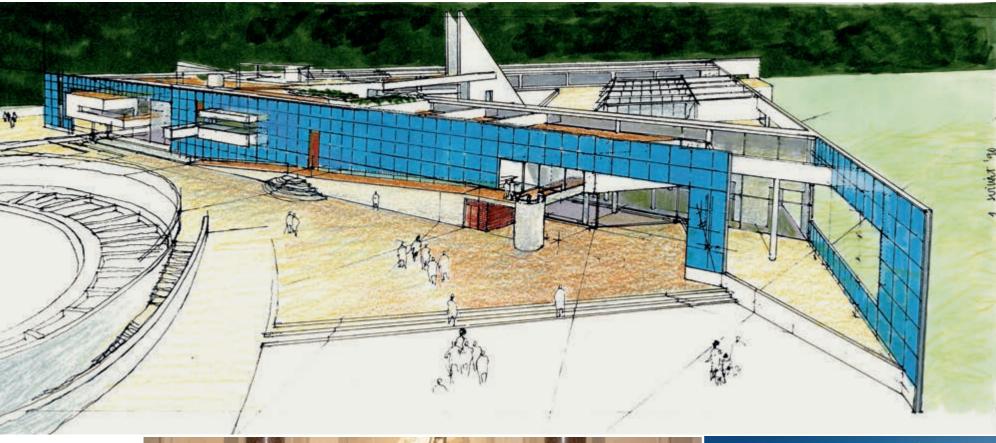
Opposite: Karen Finley, Nyack, New York, 1992

### Left page:

Views of the exhibition. Member of the Photography section Sebastião Salgado with Annie Leibovitz.

Photo credit: Juliette Agnel

6









Centre, from left to right: Jean-Michel Wilmotte, Aymeric Zublena, Anne Démians, Laurent Petitgirard, François Chaslin, awardee Henry Ciriani, Francis Rambert, Dominique Perrault, Marc Barani, Alain Charles Perrot, Philippe Trétiack, Bernard Desmoulin and Pierre-Antoine Gatier

Left: the interview between François Chaslin and Henri Ciriani held during the award ceremony, under the Institute's Coupole.

Opposite: Henri Ciriani in front of one of the models exhibited at the Pavillon Comtesse de Caen.

Photo credit: Juliette Agnel

#### Pavillon Comtesse de Caen - Palais de l'Institut de France

# HENRI CIRIANI ACADÉMIE DES BEAUX-ARTS ARCHITECTURE GRAND PRIX (CHARLES ABELLA PRIZE)

Drawings by Henri Ciriani, winner of the 2021 Académie des Beaux-Arts Architecture Grand Prix (Prix Charles Abella), were exhibited from 9 December 2021 to 9 January 2022 at the Palais de l'Institut de France's Pavillon Comtesse de Caen, with the support of the Cité de l'Architecture et du Patrimoine.

n Wednesday 8 December, under the Coupole of the Palais de l'Institut de France, member of the Académie des Beaux-Arts' Architecture section Bernard Desmoulin presented Henri Ciriani with the prize. François Chaslin, a correspondent of this same section, then interviewed Henri Ciriani.

The Académie des Beaux-Arts Architecture Grand Prix (Charles Abella Prize) is an international prize. It is endowed with 35,000 euros and awarded to an architect for their entire career. As with its awards in other disciplines, the Académie intends, through this prize, to pay tribute to an exemplary career in the field of architecture. The jury was composed of Bernard Desmoulin, Pierre-Antoine Gatier, Dominique Perrault, Alain Charles Perrot, Aymeric Zublena and Jean-Michel Wilmotte, all members of the Académie des Beaux-Arts' Architecture section.

Henri Ciriani, both an architect and a teacher, was born in 1936 in Lima and naturalized French in 1975. He made his professional debut in Peru at a very young age and was successful both in his private practice and as a civil servant, as he designed several hundred social housing units. He left his native country for France at the age of 27.

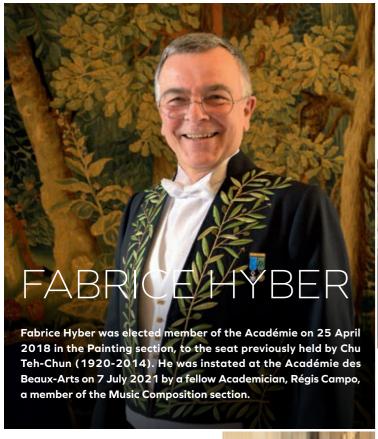
He was a member of the Atelier d'Urbanisme et d'Architecture (AUA) from 1968 to 1982. During this period, he designed social housing projects in Noisy-le-Grand, Saint-Denis and Marne-la-Vallée, as well as the Hôpital Saint-Antoine's kitchen and the crèche Au Coin du Feu (Saint-Denis), which was awarded the first Équerre d'Argent by the magazine *Le Moniteur* in 1983, the same year the Ministry of Culture awarded him the Grand Prix National d'Architecture. In the 1980s, he won competitions for the Musée de l'Arles Antique (1983-1995) and the Historial de Péronne (1987-1992), while continuing his research on housing in Évry (1988 Palme d'Or de l'Habitat), Lognes, Colombes, and in Paris, rue Charcot, Parc de Bercy and rue Croulebarbe. In Peru, he has carried out building projects in the city centres of La Victoria and San Miguel de Piura, as well as beach houses in Lima, one of which was awarded El Héxagôno de oro by Peru's Colegio de Arquitectos.

Throughout his career, Henri Ciriani has taught architecture in France and Peru (notably at the UP7, in the Ciriani-Maroti workshop, from 1972 to 1977) and then at the UP8, which became Paris-Belleville, where he created the U.N.O group (1977-2002). He has been a guest professor at many prestigious universities.

The American Academy of Arts and Letters awarded him the Arnold W. Brunner Memorial Prize in Architecture in 1997 and the Royal Institute of British Architects made him an honorary fellow in 2000. He has received honorary doctorates from the Universidad Nacional de Ingeniería, the Universidad de Huanuco, the Universidad San Martín de Porres and the Universidad Privada de Tacna. His work has been published worldwide and several books have been written about him.

academiedesbeauxarts.fr

Q



abrice Hyber, who was born in 1961 in the Vendée region in France, works in various fields including drawing, painting, sculpture and video. The fact of having studied mathematics before attending the École des Beaux-Arts in Nantes led him to place the articulation between art and science at the centre of his work. His



oeuvre presents as a network of perpetually evolving ramifications., Proceeding through accumulation and hybridization, and constantly shifting between widely diverse domains, he draws inspiration from the way in which the cellular systems of living organisms develop. One of the focal points of his work is ongoing reflection on humankind and its future in the face of scientific development and the mutations of species. Green has become his favourite colour as he explores nature and living matter in depth. With intermediate states, mutants, and hybrids, Fabrice Hyber surrounds himself with new heroes and gives birth to a multitude of animal-plants, running trees, sponge people, and so on. Since 1995, the artist's ideal forest has been growing in his native Vendée valley, where he has planted thousands of trees. Fabrice Hyber's works are featured in many French and foreign collections, and he has taken on many commissions. His Hommes de Bessines, small anthropomorphic sculptures whose body orifices spit out water, have been spreading throughout cities in France and abroad since 1991. For L'Artère, le jardin des dessins (2006), he has used a 1001m2 floor in the Parc de La Villette as his canvas, making it a living space and a site to raise awareness about HIV, while Le Cri, l'écrit (2007) commemorates the abolition of slavery in the heart of the Jardin du Luxembourg. In 2005, he collaborated with the choreographer Angelin Preliocaj for his ballet Les Quatre saisons. In 2012, he initiated the Organoïde project with the Institut Pasteur, which brought together researchers and artists to propose a new vision of biomedical research and its challenges.



Each of Fabrice Hyber's projects has several dimensions, without ever being confined to any specific artistic vocabulary. His curiosity in inventing new forms of intervention on reality leads him to merge not only techniques, but also knowledges, disciplines, and skills. The glass roof of the Lutetia Hotel (2018) was an accomplishment of several years of experimentation with glass. Similarly, with *Les deux chênes*, which he has created for the latest Parisian *passage*, the Beaupassage (2018), he moulded and duplicated one of the oldest trees in his native Vendée Valley to embed a mark, a pause, a memory of life, at the heart of the city.

### Excerpt from Régis Campo's speech:

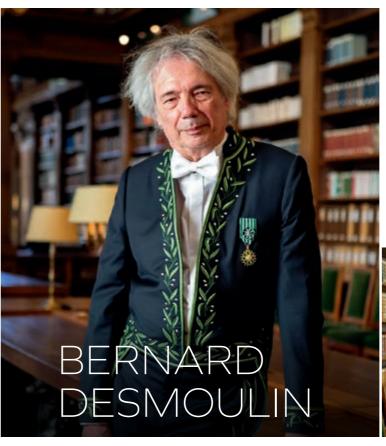
You were born, dear Hyber, in 1306. The year Giotto completed the frescoes in the Scrovegni Chapel in Padua. It was probably you, then, Giotto's assistant, who painted the angels of the Last Judgement. Especially those two angels at the top of the fresco, those angels that unfold the sky as one would a carpet. You have always unfolded the sky, dear Hyber, that is the foundation of your art. Unfolded a sky from which nothing falls anymore, and where the names of men remain fixed in the air like stars.

And then you were born a second time, on 12 July 1961, in Luçon, in Vendée. Your mother and father were sheep farmers. In your eyes, they were "beautiful lovers, very independent and progressive". As a child, you diverted streams to direct rainwater towards other secret purposes. With earth, you liked to create objects and sow seeds (like conifer seeds from your grandmother's house). Throughout your adolescence, you enjoyed doing strange things, like inventing a hole punch, turning on the water without touching the tap, drawing slogan posters for sheep farmers' demonstrations...".

Centre: during Fabrice Hyber's tribute to his predecessor Chu Teh-Chun, a work by the Chinese painter was presented to the public under the Coupole of the Palais de l'Institut.

Above, from left to right, members of the Painting section: Pierre Carron, Gérard Garouste, Fabrice Hyber, Philippe Garel and Jean-Marc Bustamante.

Photo credit: Patrick Rimond



Dramatic Art in Paris and Clichy, with the latter work earning him the Équerre d'argent prize in 2009. In 2013, he designed the Centre d'Art Contemporain in Montreuil and, in 2017, the Centre de Conservation Archéologique in Metz. He has taught Architecture at Versailles, Sciences-Po, the Ecole de Chaillot and the Paris Val de Seine School.

#### Excerpt from Aymeric Zublena's speech:

You have a high opinion of your profession as an architect. You deplore the fact that the words beauty, harmony and serenity have become taboo, to be replaced by efficiency and productivity. It pains you to see how poorly some know and understand this beautiful craft. Upon arriving at Villa Medici, you were shocked when a fellow resident – a com-



Bernard Desmoulin was elected member of the Académie on 14 November 2018 in the Architecture section, in the seat previously held by Yves Boiret (1926-2018). He was instated at the Académie des Beaux-Arts by his fellow member of the same section, Aymeric Zublena, on 29 September 2021.

**B** ernard Desmoulin is the author of a singular body of work rooted in an unfailingly curious interest in landscapes and materials, from the Necropolis of Fréjus, buried in the Mediterranean landscape, to the Musée de Cluny. After studying architecture in Paris, under the glass roof of the Grand Palais, he worked for major agencies on prestigious projects in Paris and New York. When he was a resident at the Villa Medici in Rome, he transformed its main salon into an exhibition space. In 1993, he was awarded the public commission for the memorial to the Indochina wars in Fréjus, a site and an endeavour that are in equal parts landscape and building. With a desire to make the past an "open table", he has composed contemporary scenarios for remarkable sites such as the Salle Pleyel, the Entrepôts Lheureux in Bercy, the Musée Rodin in Meudon, and the Abbeys of Port Royal and Cluny in Burgundy. He restructured and fitted out the Château de Versailles' imposing Grand Commun. Be it in the museum of Sarrebourg or in those of Cluny and Arts Décoratifs in Paris, in the Matisse Museum in Cateau-Cambresis or the Abbey of Saint-Vaast in Arras, his interest in scenography has often complemented his activity as an architect. Bernard Desmoulin has created cultural facilities in Marseille, Neuilly, Ris-Orangis, Reims, and Troyes, among other cities, as well as two conservatories for Music, Dance and



poser – told you that he saw architects not as artists, but as technicians, albeit superior ones. Was he joking? I would have smiled, perhaps laughed. Not you, though [...] The best architects command this technical aspect of the art of building and, having mastered it, put it at the service of the

shapes, volumes and spaces that surface from their imagination and science. Through their genius, it becomes architecture. Mies van Der Rohe said that 'whenever technology reaches its true fulfilment, it transcends into architecture'. Without technique, without the demanding rigour of calculations and construction, architecture is nothing more than seductive drawings, paper dreams, unfulfilled reveries."

Top: members of the Architecture section Aymeric Zublena, Alain Charles Perrot, Dominique Perrault and Bernard Desmoulins around the 2022 President of the Académie engraver Astrid de la Forest.

Above: Laurent Petitgirard and Bernard Desmoulins.
Photo credit: Juliette Aanel

Jean-Michel Othoniel was elected as a member of the Académie des Beaux-Arts on 14 November 2018, in the Sculpture section, to the seat previously held by Eugène Dodeigne (1923-2015). He was instated at the Académie by his fellow member Adrien Goetz, from the Free Members section, on 6 October 2021.

ean-Michel Othoniel, born in 1964 in Saint-Étienne, has invented a world with multiple contours. While he started off exploring sulphur and wax, he has been using cast metal and glass since 1993 and has collaborated with the best Murano craftsmen. There is an architectural dimension to his works, which have been introduced to gardens and historical sites through public or private commissions throughout the world. The delicacy of glass and the subtlety of its colours take part in the artist's vast project: to bring poetry and enchantment back into the world. In 1996, he began to place his works in conversation with landscapes, hanging giant necklaces in the gardens of the Villa Medici in Rome, on trees in the Peggy







Guggenheim Collection's Venetian garden (1997), and at the Alhambra and the Generalife in Granada (1999). In 2000, he transformed Paris' Palais-Royal-Musée du Louvre metro station into the *Kiosque des Noctambules*. In 2004, he installed his first self-supporting necklaces in the Mesopotamian rooms of the Louvre Museum. Among those was *Rivière Blanche*, which was subsequently acquired by the Musée d'Art Moderne de la Ville de Paris. In 2010, the Centre Pompidou held a major retrospective exhibition of his work called "My Way". For its 10th anniversary in 2013, the Mori Art Museum in Tokyo commissioned him to create *Kin no Kokoro*, a monumental heart made of gilded bronze beads, which was installed permanently in the Japanese-style *Mohri Garden*. In 2015, he created three fountains in gilded glass sculptures, *Les Belles Danses*, in the gardens of the Château de Versailles. This was the first

Above: the sword was handed to Jean-Michel Othoniel at the Petit Palais, where the sculptor was exhibiting his work as part of the exhibition Le Théorème de Narcisse. From left to right: former Minister of Culture Jack Lang, Permanent Secretary Laurent Petitgirard, Jean-Michel Othoniel and Johan Creten, who designed the sword's pommel.

Right: Jean-Michel Othoniel, Danny Laferrière of the Académie Française and Adrien Goetz of the Free Members section.

Photo credit: Juliette Agnel

permanent work commissioned from a contemporary artist in the palace. In 2016, he unveiled a total and monumental work of art, *Le Trésor de la cathédrale d'Angoulême*, the result of eight years of work. In 2019, he exhibited paintings at the Louvre Museum that were created for the 30th anniversary of its Pyramid, which the Museum will permanently keep. In 2021, with *Le Théorème de Narcisse*, he offered a wonderous walk to visitors at the Petit Palais.

#### Excerpt from Adrien Goetz's speech:

For a long time I didn't get your work. Like everyone else, I had shown up at the Palais Royal, in front of your Kiosque des Noctambules, I had met the eternal little prince of contemporary art at parties in the courtyard of the École des Beaux-Arts, but I didn't really see you [...] We talked about cathedrals and treasures. Not Chartres, not Amiens, not Reims, not Paris, but Angoulême, alas, that forsaken building that Paul Abadie had transformed in the 19th century. You'd sprung into impassioned praise of its neo-Romanesque architecture and of all that is marvellous about it, as a machine producing dreams which, around 1880, came in heavenly shades. Your eyes were bright. You were inventing a treasure for this cathedral which had none and which – and you liked that about it – had already been reinvented."

Blanca Li, born in Granada, Spain, in 1964, is a chore-ographer, film director, dancer and actress. At the age of seventeen, she left for New York where she studied at Martha Graham's school. She founded her first contemporary dance company in Spain, which was selected for the Universal Exhibition in Seville, and then founded her Parisian company in 1993. She worked with a broad array of themes, ranging from the trance ceremonies of the Gnawa of Marrakech (Nana et Lila, 1993) to ancient Greek art (Le Songe du Minotaure, 1998). She opened the Suresnes Cités Danse Festival in 1999 with a hip hop creation, Macadam Macadam, which earned her the 2007 Globe de Cristal. At the Komische Oper in Berlin, she



tackled the madness of the contemporary world in the context of the 11 September 2001 attacks (Borderline, 2002). She directed the vocal ensemble Sequenza 9.3 to a score by Édith Canat de Chizy (Corazón Loco, 2007), then to Federico Garcia Lorca's poems (Poeta en Nueva York, 2007) in the gardens of the Alhambra, and to the work of Jérôme Bosch for the opening of the Montpellier Dance Festival (Le Jardin des délices, 2009). Blanca Li created the first show with NAO, a humanoid robot (Robot, 2013), and a masterful duet for Bolshoi star Maria Alexandrova and herself in a feminist and mythological manifesto (Déesses & Démones, 2015), and two years later staged the relationship between Man and Nature (Solstice, 2017). Major institutions have hosted her installations, events or choreographies (Grand Palais, Théâtre des Champs-Élysées, Châtelet, Opéra National de Paris, Metropolitan Opera, among others). Without her company, some of her works that stand out most are El Quijote del Plata, (2018) for Uruguay's National Sodre





Ballet and *Pulcinella* (2020) for the Spanish National Ballet, to Stravinsky's score, as well as three feature films (*Le Défi* in 2002, *Pas à Pas* in 2009, and *Elektro Mathématrix* in 2015). She was appointed artistic director of the *Teatros del Canal* in Madrid in 2019 and in the autumn of 2021 presented *Le Bal de Paris by Blanca Li* at Chaillot, a live immersive virtual reality performance which earned her the Lion for the Best Virtual Reality Experience at the 78th Venice International Film Festival.

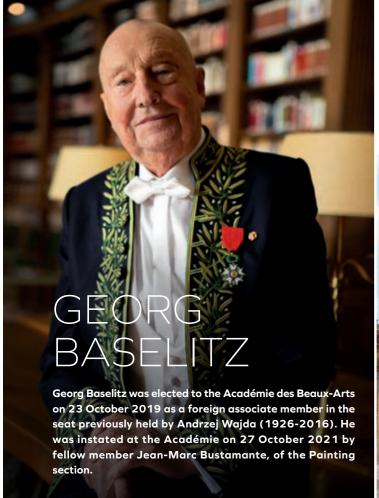
### Excerpt from Frédéric Mitterrand's speech:

'Women's legs are compasses that traverse the globe in all directions, giving it balance and harmony', said François Truffaut who, having left us far too early, was not fortunate enough to know you. When I saw you dance, he was the first to come to my mind. And then other words also came to mind when considering the formidable energy, the perpetual generosity, the sweet, joyful, crazy impetus to go further and further that animates you and carries you far beyond the staleness of certain current controversies: 'women who seek to be equal with men lack ambition!' That's from Marylin Monroe, a faint-hearted blonde who always had something to say when she spoke."

Top: Frédéric Mitterrand, from the Cinema and Audiovisual section, welcoming his colleague Blanca Li.

Below: Dancers of the Compagnie Blanca Li performed four pieces illustrating the eclecticism in the choreographer's work: electro, flamenco, classical and contemporary dance.

Photo credit: Juliette Agnel





Opposite: Throughout the retrospective devoted to him at the Centre Pompidou, until 7 March 2022, Georg Baselitz's sculpture Zero Dom (2020) is exhibited on the forecourt of the Institut de France.

Below: on the steps of the Palais de l'Institut, Permanent Secretary Laurent Petitgirard, 2021 President of the Académie Alain Charles Perrot, Jean-Marc Bustamante, and Georg Baselitz.

Photo credit: Juliette Agnel



ans-Georg Bruno Kern, born in 1938 in Deutschbaselitz, Germany, was admitted to the Academy of Visual and Applied Arts in East Berlin in 1956. Four years later, he produced his first works, the Rayski head series. From 1961 onwards, he would go by the moniker of Georg Baselitz, in reference to his hometown. His first solo exhibition was held in 1963 at the Werner und Katz Gallery in Berlin. Two of the works he exhibited, including Die Große Nacht im Eimer (The Big Night Down the Drain, Museum Ludwig, Köln), were banned for indecency. A strong desire for singularity shows in these violent and iconographically provocative works. His work gradually diversified: Baselitz painted, drew, engraved, and sculpted. In 1969 he began his work on inverting motifs, starting with the painting Der Wald auf dem Kopf (The Wood on Its Head): all the subjects in his personal repertoire were turned upside down (figures, trees, houses, etc.) to affirm the primacy of the gaze over the subject. This created a striking tension between figuration and abstraction. His works borrow from both German expressionism and American painting. Be it the Heroes series or his finger paintings, the fracture paintings or the Russian paintings, his works, which echo the traumas of German history, are featured in all prestigious public collections. In 2006, he began reinterpreting his own iconography with his series of remixed paintings. His first major retrospective was held in the United States in 1995. In 2004, he was awarded the Praemium Imperiale for painting, in Tokyo. "Baselitz - The Retrospective", which was set up with the artist's collaboration, is the first comprehensive exhibition of Georg Baselitz's work.



Excerpt from Jean-Marc Bustamante's speech:

You're a radical painter insofar as you concentrate solely on all the steps of your method. You don't speak any foreign languages, you can hardly count, you claim to lose all your bets, but you keep digging, you work the same things over and over again, and yet a new Baselitz painting is always new [...] Hence the idea for your famous 'Remix' series: it's not about revisiting and re-arranging your hits, but about putting your method to the test and shedding the miasma, the slag, the stench that still cluttered your soul and your mind when you were young. Hence this idea of redoing your paintings with distance and humility, a way of apologising for the tragic results that spilt over onto you in your beginnings. To stand vertically aside from yourself and consider things with grandeur."

Pierre Collin was elected member of the Académie des Beaux-Arts on 25 April 2018 in the Engraving section, to the seat previously held by René Quillivic (1925-2016). He was instated on 1 December 2021 by fellow member of the Engraving section Érik Desmazières.

ierre Collin was born in 1956 in Paris. In 1975, he entered the École des Beaux-Arts in Paris where he attended the painting, sculpture and engraving workshops, From 1980 to 1982, he was a resident at the Casa de Velázquez in Madrid. His drawing, painting and engraving work evolved with each of his moves: Madrid, Barcelona, Paris, Burgundy, Brittany. As both a painter and an engraver, he considers these two activities to be inseparable. Pierre Collin's work has developed in successive and sometimes overlapping series. He uses books as an opportunity to present his series within a narrative framework. Over the years, the artist has diarized his gaze. In 2004, he published the album Strabismes, a series of engravings composed in diptychs, all sequences from his drawn diary, echoing Georges Pérec's L'Infra-ordinaire. In developing his series, he likes to work on multiple points of view. He elaborates sequences through the use of predella, polyptychs, friezes, or leporellos, as a way to

lay out what he sees, and an attempt to fix time. Since 2018, he has been developing a new project using glass cages placed between his subject and himself. This ongoing series has given rise to recto verso landscapes created at the Villa Montebello - Trouville Museum. His first solo exhibitions were held in 1983 at the Galerie du Haut Pavé (paintings) and the Galerie André Biren (prints), in 1984 at the Brody Gallery in Washington, and in 1985 at the Area X Gallery in New York. From 1986 onwards he worked closely with the Lacourière-Frélaut studio, which printed and published his engravings, and exhibited his works several times in its Parisian gallery. He has held some forty solo exhibitions in France and abroad. In 2007 and 2008, on the occasion of two retrospective exhibitions, Buchet-Chastel published a monograph, entitled Vertiges ordinaires, in the "Cahiers dessinés" collection. He has also participated in numerous group exhibitions, for instance, "Apparences de la vie normale" at the Musée de Rennes, in 2009, and "Miroirs" at the Musée du Louvre - Lens, in 2017.

### Excerpt from Érik Desmazières' speech:

A copper plate, a drypoint, a burin, that small square steel rod, bevelled at the end and very well sharpened, an etching bath to dig the furrows, the aquatint powder and its promise of random greyish tones; then comes the press, the moment of revelation, and the second half, which will apply a thick layer of the printer's greasy and subtle ink on the paper, either rough laid or velvety vellum. This magic has dates: it began five hundred and fifty years ago with Albrecht Dürer. The intrinsic beauty of the print, of its generosity and of sharing – its "democratic" aspect, as Albérola put it –; its power to multiply the work through the matrix. As an art, it is neither exclusive nor shut inwards on itself: for, just like Dürer and many, many artists after him, you practice it as much as you paint, on an equal footing."

Top right: Pierre Collin, engravers Érik Desmazières and Astrid de la Forest, and member of the Painting section and draughtswoman Catherine Meurisse.

Below: comic book author Emmanuel Guibert broke into song to present Pierre Collin with his sword.

Photo credit: Juliette Agnel







The Académie des Beaux-Arts held its solemn autumn opening session on Wednesday 17 November under the Coupole of the Palais de l'Institut de France. After president Alain Charles Perrot paid tribute to the deceased members of the Académie, Astrid de La Forest, Vice-President, presented the 2021 list of awardees, rewarding some fifty artists of all ages and disciplines.

The session was interspersed with performances by the Maîtrise de Sainte Anne d'Auray, the winning ensemble of the Liliane Bettencourt Prize for Choral Singing, conducted by Gilles Gérard, and the Orchestre Colonne, conducted by Jean Deroyer and Laurent Petitgirard, who, in keeping with tradition, closed the ceremony with a performance of *La Fanfare de La Péri* by Paul Dukas.

On this occasion, the Orchestre Colonne premiered Aurélien Dumont's composition Amorces - Eclipses (Éd. Musicales Archipel), a work commissioned by the Fondation Simone et Cino del Duca - Institut de France, on the recommendation of the Académie des Beaux-Arts. The list of prize awardees and competition winners has been published as a separate document, which is attached to this issue of the Lettre.

The following is an excerpt from Permanent Secretary Laurent Petitgirard's speech entitled "Moral right, creators' last defence":

To speak of the author's moral right is to touch upon the most singular (and therefore the most extraordinary) of the prerogatives granted to all creators by the law. The moral right, a fundamental right of authors, is not economic in nature but aims to protect the work itself and the link between it and the author. It is therefore never meant to be commodified, although disputes are seldom free of any pecuniary ulterior motive. In certain hands, moral right is frequently abused. Thus, it took years for our late fellow, the great composer Marius Constant, to be granted authorization to orchestrate Maurice Ravel's Gaspard de la Nuit, while André Rieu easily obtained permission to concoct an arrangement based on the same composer's Bolero. Who knows why!

Of course, we must oppose these abuses as best we can, to preserve all the beauty of moral right; its raison d'être is nothing less than the bond between creators and their creations. This imperative to protect works of art is of such importance that creators' moral right outlives them; while other personality rights end upon their holder's death, the law recognizes the moral right's perpetuity, which necessarily implies its transmission



post mortem auctoris. However, when oversight fails, this transmission can give rise to absurd and grotesque situations. It is essential that the author's will be as precise as possible as to the terms of this right's transmission, to avoid regrettable abuses. Moral rights are distinct from mere ownership of the work. For example, ownership of a painting whose creator is still alive does not grant one the right to reproduce the painting nor, of course, to modify it – and especially not to destroy it.

Top: The Orchestre Colonne, conducted by Jean Deroyer, in the world premiere of the work Amorces - Eclipses by Aurélien Dumont, the winner of the Fondation Simone et Cino del Duca - Institut de France commissioning prize, awarded on the recommendation of the Académie des Beaux-Arts.

Below: The Liliane Bettencourt Prize for Choral Singing winning ensemble Maîtrise de Sainte Anne d'Auray, conducted by Gilles Gérard.

Right-hand page: The winners of the Académie's prizes and competitions are traditionally announced during the solemn session. The representatives of Arthena Editions were handed the Cercle Montherlant – Académie des Beaux-Arts Book Prize by Astrid de la Forest.

Photo credits: Juliette Agnel

16 | 17



n this occasion, a delegate from each of the five Academies delivers a speech, in which they look at a theme chosen by the group, through the lens of their speciality. The 26 October 2021 session, on the theme "Life", was chaired by member of the Académie des Sciences Morales et Politiques I would like to salute Jean Jouzel and Claude Lorius, two friends and President of the Institut de France, André Vacheron.

The delegates were: Pierre Brunel, from the Académie des Sciences Morales et Politiques, with a speech titled "Is real life absent?"; Tatiana Giraud of the Académie des Sciences, with "The diversity of life forms: origins, importance and current crisis"; Jean-Robert Armogathe of the Académie des Inscriptions et Belles-Lettres, with "Life is a dream"; and Jean-Luc Marion, of the Académie Française, with "Life - or that which we never possess".

The Académie des Beaux-Arts was represented by member of the Photography Section Yann Arthus-Bertrand, with a speech entitled: "Thanks to life", from which the following is excerpted:

We are all privileged here. We live in a rich country. Picture Bangladesh, a country I know well, with its 160 million souls, one of the poorest countries in the world. I have seen and filmed the melting of the Himalayan glaciers, which is destroying the islands of the delta and their villages. I have also filmed the consequences of increasingly violent cyclones on the coast and rising waters. These people are now experiencing climate change in their very flesh - although a Bangladeshi emits only 0.3 tonnes of carbon per year, while a French person emits 12 tonnes, and an American emits 18 tonnes. What an injustice! Let's be brave enough for truth. For responsibility. My dear colleagues, I would like to dream with you. Our institution, by virtue of its history and of the very core of its mission, can play an important role in what can only be described as the greatest challenge that humanity has ever faced. I would like us to tackle the issue in a spirit of enthusiasm and ambition. In the face of a public opinion that is increasingly critical of science and

lacking confidence in it, I wish for us to work together to develop responses on a par with the talents that our five academies contain, with all 468 academicians, 171 foreign associate members, and 267 correspondents.

of mine who are members of the Académie des Sciences and of the IPCC. Claude Lorius' work on air bubbles trapped in ice has made it possible to trace the climate composition of the planet over hundreds of thousands of years. Their joint work has shown the direct link between global warming and the CO2 levels in the atmosphere as they rise due to human activity. Jean Jouzel, his IPCC colleagues, and Al Gore were collectively awarded the Nobel Peace Prize

All of us are driven by high values, by a concern for rigour and the search for beauty. We are all rich in our skills, our history, and our sensitivity. We all live in the common home that is the Earth. Our representativeness is an opportunity. Our missions extend into many fields. We have the power to support creation and research. We can multiply our interventions and publications. Our institution could become the place where solutions are expressed, for our pluralism of thought is our sword, the symbol of a revolution of minds, a symbol of collective courage, the symbol of a planetary academy."

Above, from left to right: Photographer Yann Arthus Bertrand representing the Académie des Beaux-Arts, Xavier Darcos, Chancellor of the Institut de France Tatiana Giraud of the Académie des Sciences Jean-Robert Armogathe of the Académie des Inscriptions et Belles-Lettres' André Vacheron, President of the Institut de France, Pierre Brunel of the Académie des Sciences Morales et Politiques, and Jean-Luc Marion of the Académie

Photo credit: Ben Dauchez / H&K



After François-Bernard Mâche's tributes to the holders of Seat n°5 and Gilbert Amy's to those of Seat n°4, on 14 October Permanent Secretary of the Académie des Beaux-Arts, Laurent Petitgirard, paid tribute to his colleagues who successively occupied Seat 1 of the Académie des Beaux-Arts' Musical Composition section since 1795. On 7 December 2021, composer Édith Canat de Chizy did likewise for Seat n°6. Photos Juliette Agnel

#### Concert for Seat n°1

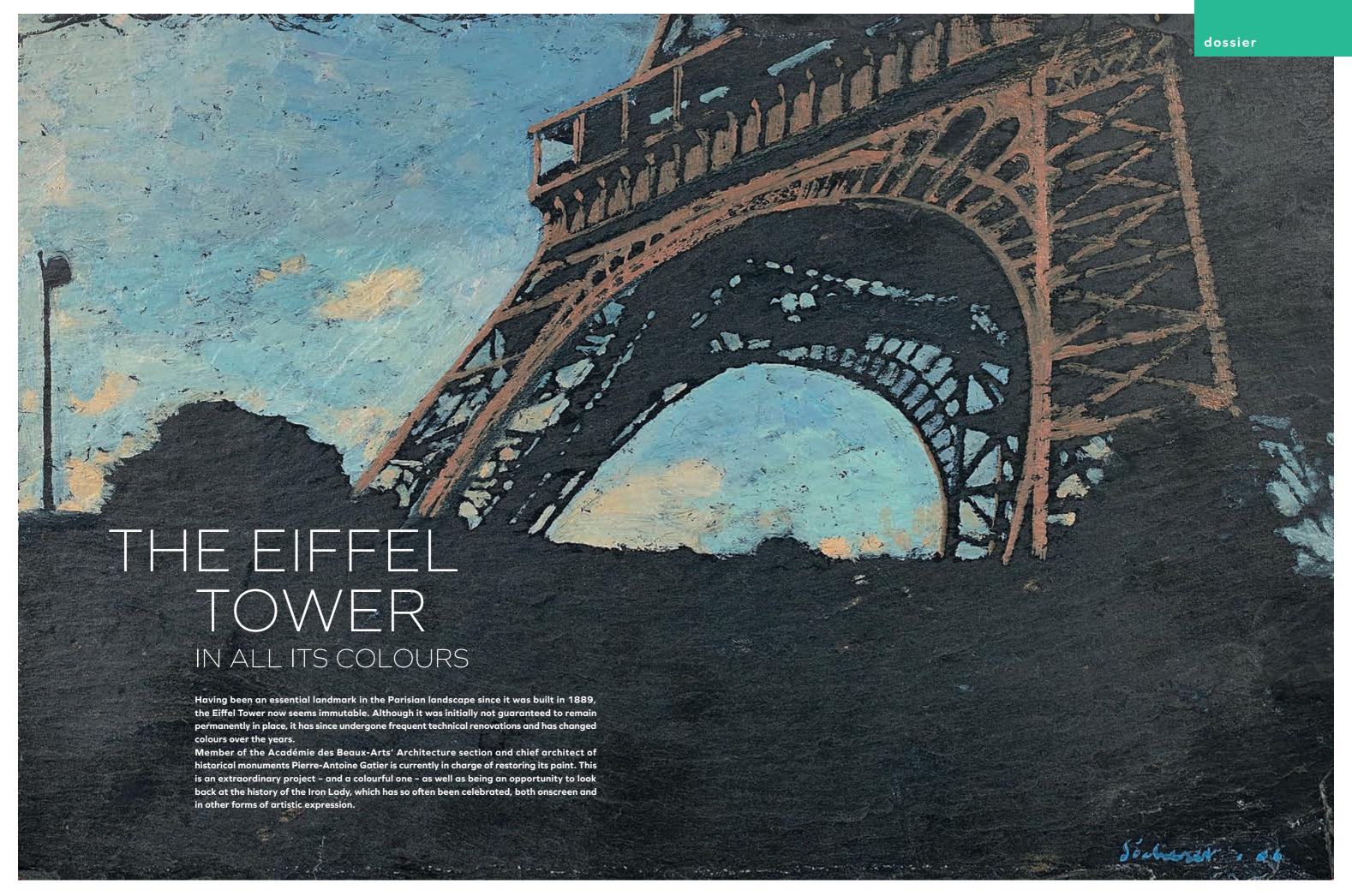
What a fascinating exploration of our musical heritage was this third "Concert d'un fauteuil" at the Académie des Beaux-Arts! Conducted by current holder of Seat n°1 Laurent Petitgirard, the Orchestre de Picardie, Orchestre National en Région Hauts-de-France (musical director Arie Van Beek) and the soloists Marie-Pierre Langlamet (harp), Jean Ferrandis (flute), Yan Levionnois (cello) and Paul Gaugler (tenor) performed eleven works that resounded in the André and Liliane Bettencourt auditorium during this exceptional concert.

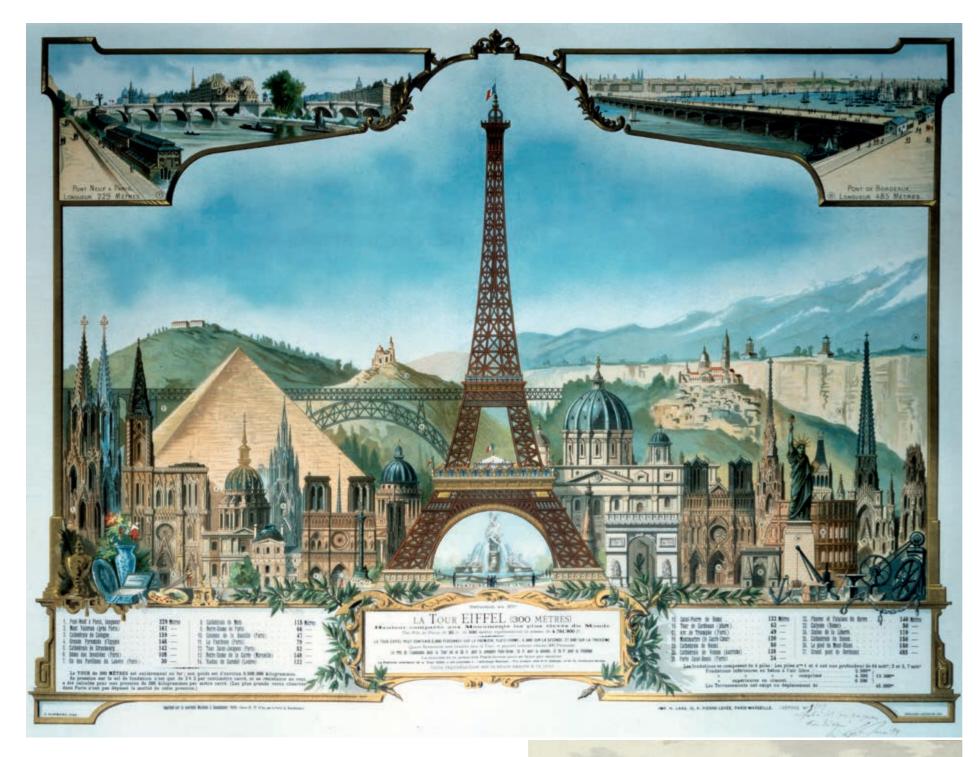
Programme: Étienne-Nicolas Méhul (1763-1817, elected in 1795) - Final of the First Symphony; Francois Boieldieu (1775-1834, elected in 1817) - Final Rondo of the Concerto for Harp and Orchestra; Antoine Reicha (1770-1836, elected in 1835) - Overture to Natalie ou la Famille russe; Jacques Halévy (1799-1862, elected in 1836) - "Rachel, quand du Seigneur..." (from La Juive); Antoine-Louis Clapisson (1808-1866, elected in 1854) - Overture to the opera Le Code Noir; Charles Gounod (1818-1893, elected 1866) - "Ah! Lève-toi, soleil" (Romeo's aria, from Roméo et Juliette); Théodore Dubois (1837-1924, elected in 1884) - Andante cantabile for cello and orchestra: Gabriel Pierné (1863-1937, elected in 1924) - Konzertstück for harp and orchestra; Henri Busser (1872-1973, elected in 1938) / Claude Debussy - Orchestration of Claude Debussy's Petite Suite, first movement "En Bateau"; Marcel Landowski (1915-1999, elected in 1975) - Adagio cantabile; Laurent Petitgirard (elected in 2000) - Dilemme for harp, flute and string orchestra.

#### Concert for Seat N°6

On Tuesday 7 December, the Académie des Beaux-Arts' fourth "Concert d'un fauteuil" allowed us to rediscover works from our musical heritage. Conducted by member of the Académie des Beaux-Arts' Bruno Mantovani, the Ensemble Orchestral Contemporain -renowned for its interpretation of 20th and 21st century music - along with soloists Gaël Rassaert (violin), Patrick Oriol (viola) and Roxane Gentil (piano), performed nine works in the André and Liliane Bettencourt Auditorium. The concert ended with Édith Canat de Chizv's Outrenoir for solo viola and ensemble, a tribute piece for Pierre Soulages commissioned by the Ensemble Orchestral Contemporain. It was premiered on 21 November 2017 at the Opéra de Saint-Étienne and dedicated to Bruno Mantovani.

Programme: Jean-François Lesueur (1763-1837, elected in 1815) - Marche du sacre de Napoléon Ier; Michele Carafa (1785-1872, elected in 1837) - Le Solitaire; François Bazin (1816-1878, elected in 1873) - La Seine; Jules Massenet (1842-1912, elected in 1878) - La méditation de Thaïs; Gustave Charpentier (1860-1956, elected in 1912) - IV. Sur les cimes; Louis Aubert (1877-1968, elected in 1956) - Sillages (excerpt from Sur le rivage); Tony Aubin (1907-1981, elected in 1969) -Suite éolienne n°3; Daniel-Lesur (1908-2002, elected in 1982) -Pastorale; Édith Canat de Chizy (elected in 2005) - Outrenoir.





Above: The Eiffel Tower's 300 metres, as compared to the height of the tallest monuments in the world (A. Normand).

Right: The Tower during its construction, seen from the right bank of the Seine, silk engraving by the Belgian painter and engraver Gustave Fraipont (1849-1923).

Eiffel Tower Collection

# THE THREE-HUNDRED-METRE TOWER

By BERTRAND LEMOINE, architect, engineer, and historian

The Eiffel Tower, one of the world's most famous monuments, bears the name of the man in charge of its construction, Gustave Eiffel, although he did not actually invent it. His credit lies nevertheless in having been able to actualize the idea. At his own risk, he overcame political, administrative, financial, and technical obstacles to building the boldest construction of his time, thus demonstrating that modern-day science and industry could also produce masterpieces on a par with the pyramids of Egypt.

#### The birth of the three-hundred-metre tower

The Tower was born in the context of the Exposition Universelle (world fair) organized to celebrate the 1789 Revolution and France's consolidated status as a great industrial nation on the international scene. The search for height and the spiritual elevation it is meant to induce are a classical theme in sacred architecture. The new resources offered by technology in the positivist 19th century had already led good minds to dream up thousand-foot towers, such as that of the Englishman Richard Trevithick in 1833, and of the American engineers Clarke and Reeves for the 1876 Centennial Exhibition in Philadelphia. In 1884, when it appeared to be confirmed in principle that a new Exposition Universelle would be held in Paris, this thousand-foot figure in turn excited the imagination of the Eiffel company's main engineers Émile Nouguier and Maurice Koechlin.

On 6 June that year, they drew up a rough draft of a three-hundred-metre tower "to give the exhibition appeal": a simple iron pylon, formed by four openwork posts which were spaced at the base, joined at the top, and connected by large horizontal crossbeams. This design was directly derived from the large viaduct piers the company had already built. The pillars' curvature was mathematically determined to offer the best possible resistance to the horizontal effect of wind. Eiffel initially paid only casual attention to this rudimentary design, yet he allowed his engineers to continue working on it. They enlisted the help of the architect Stephen Sauvestre, who gave the project a finished look by adding monumental arches between the four pillars and the first floor, intended both to increase the impression of stability through the canonical shape of the arch and to represent a possible entrance to the Exhibition. He placed large glass rooms on the upper floors and added various embellishments to the building overall. When Eiffel saw the project thus decorated and made habitable, he had a complete change of heart and even took out a patent in the names of Eiffel, Nouguier and Koechlin. He later bought exclusive ownership of the patent from them, including for foreign markets. Eiffel's genius was therefore not in inventing the Tower; it was in understanding the project's importance and in implementing it.

While Eiffel was trying to discredit a rival project for a masonry tower by the architect Jules Bourdais, a competition of ideas was opened to French architects and engineers on 1 May 1886 "to bring forth overall ideas (for the Exhibition), facilitate their comparison, and identify the best course of action to adopt". Among other things, the programme invited competitors to "study the possibility of erecting a 300-metre iron tower with a square base of 125 metres on each side, on the Champ de Mars". This was an almost explicit reference to Eiffel's project, as he had already convinced the authorities of the merits of its design. It logically ensued that Eiffel won the contract to build this tower. The project's architectural design was then once again redefined, with simplified decoration and smaller arches and covered rooms. This is the version of the project that was on the table in January 1887 when Eiffel, the French State, and the City of Paris signed an agreement granting Eiffel a twenty-year operating concession and a subsidy covering barely a quarter of the construction costs, with Eiffel himself financing most of the rest from loans. The version of the project that was eventually built was simplified even further.

### The artists' protest

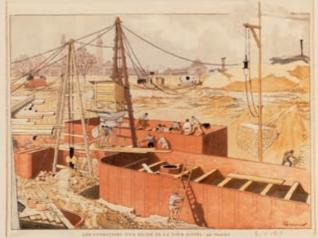
Construction work had barely begun when the famous "Artists against the Eiffel tower" was published in the 14 February 1887 issue of the newspaper Le Temps. It was signed by some of the greatest names in art and literature, including Charles Gounod, Guy de Maupassant, Alexandre Dumas junior, François Coppée, Leconte de Lisle, Sully Prudhomme, Charles Garnier, William Bouguereau, Ernest Meissonier, Victorien Sardou and many others. The authors of this well-known text had come to "protest with all our strength, with all our indignation in the name of slighted French taste, against the erection in the heart of our capital city, of this useless and monstrous Eiffel Tower, which public malice, often imbued with common sense and a spirit of justice, has already baptized with the name Tower of Babel". This was followed with epithets such as "the baroque, mercantile imaginations of a machine builder", "a giddy, ridiculous tower", "a gigantic black smokestack", and "stretching like a blot of ink the appalling shadow of the appalling column of bolted sheet metal". The Tower, which already bore Eiffel's name, caused such a stir not just because it was made of iron, but because its quintessentially industrial appearance was a stark testimony to the irruption of engineers' art in the Parisian landscape.

Although Eiffel was primarily interested in the Tower as a technical challenge, he responded to the artists' protests in an interview with Le *Temps*, in which he summed up his artistic doctrine: "I, for one, believe that the Tower will have its own beauty. (...) Is it not true that the very conditions which give strength also conform to the hidden rules of harmony? ... Now to what phenomenon did I have to give primary concern in designing the Tower? It was wind resistance. Well then! I hold that the curvature of the monument's four outer edges, which is as mathematical calculation dictated it should be ... will give a great impression of strength and beauty, for it will reveal to the eyes of the observer the boldness of the design as a whole. It should be said that there are singular attraction and charm to the colossal, to which the ordinary theories of art do not apply". Eiffel thus argued that the aesthetics of the Tower were neither avant-garde nor even in contradiction with the architectural rules of its time; it was simply elsewhere than where it was expected. It was both purely rational, abstract, appended to the laws of science, and moral, "a symbol of strength and of difficulties overcome". The only thing Eiffel did not foresee was that it could become the paradoxical emblem of a city like Paris, with its formidable wealth of stone structures, and a support for the collective imagination that could be modelled and endlessly reproduced.

Top: Gustave Eiffel, in the centre, and his colleagues. Photo credit: DR, Eiffel Tower Collection

Centre: The caissons for the pile under one of the Tower's legs, colour print. Eiffel Tower Collection / Eugène Grasset







#### An exemplary construction site

All the chroniclers of the time agreed that the Tower's assembly was a marvel of precision. It must have been extraordinary for Parisians to see this immense metal scaffolding progress day after day. Two of the legs rest on piles which lie below the bed of the Seine. Their installation required the use of watertight metal caissons, where compressed air injection allowed workers to operate below the water level. The assembly of the piles began on 1 July 1887. All the parts arrived from the Levallois-Perret factory, already pre-assembled in elements about four metres long. Twelve thirty-metre-high temporary wooden scaffoldings supported the legs on the first floor. The parts were then lifted by steam cranes that climbed the Tower as it rose, using the slides provided for the lifts. New scaffolding was needed to support the large beams on the first floor. "Sandboxes" and temporary jacks allowed the position of the steelwork to be adjusted to the millimetre. The pieces were assembled on site using temporary bolts, which were gradually replaced by hot rivets, half of which had already been installed in the workshop.

Equipping the Tower with lifts capable of transporting large numbers of people in perfect safety posed a difficult technical problem, as lifts of such great height had never been built before. Several solutions were implemented: in the north and south pillars, a double-decker cabin supplied by Otis was pulled by a cable operated by a hydraulic piston whose stroke was multiplied through a set of pulleys; in the east and west pillars, lifts serving the first floor built by the French company Roux, Combaluzier and Lepape were operated by a double chain driven by hydraulic force. Finally, a vertical lift built by Édoux connected the second and third floors by means of two mutually balancing cabins, with a change of cabin on a platform halfway up. All these lifts were subsequently replaced or renovated.

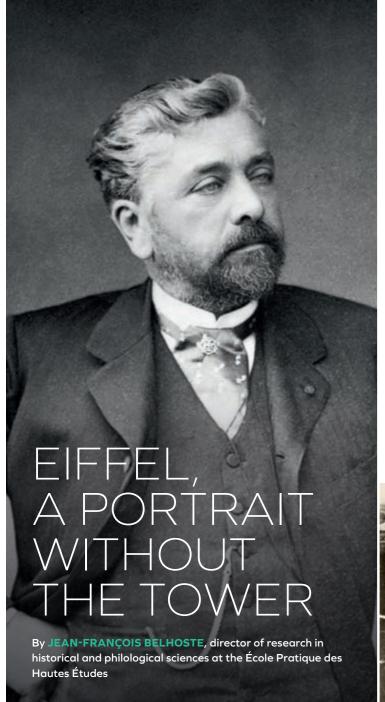
#### The success of the Tower

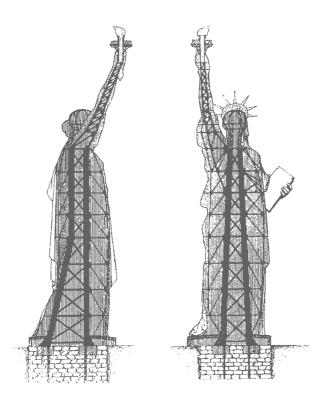
This exemplary construction project was completed in only twenty-six months, and the Eiffel Tower immediately went on to be a popular hit that would later become the symbol of Paris. The way we look at it today is shaped by the time that separates us from its construction and by all the mythologies it has come to support. We should see it first and foremost as its contemporaries discovered it: a masterpiece of engineering art, a triumph of the power of industry, a colossal attraction, commensurate with the challenges that the 19th century had set itself, capable of spectacularly exalting the new achievements of science and technology. Eiffel was well aware of the value of his masterpiece, and actively sought to find a scientific use for it in order to ensure

that it would last beyond the twenty-year concession period. He achieved that when it turned out to be a valuable antenna support for long-distance military radio.

The Tower not only immortalises the name of Eiffel; it is also the hallmark of a century and of its constructive genius. While it still exerts the appeal of a colossal theme park where people come in search of vertiginous thrills and surprises, panoramic glimpses and new sensations, by virtue of its abstract and function-free nature and the purity of its structure – which promoters of modernity recognized early on –, it remains an open support for all of the expressions of the city and the nation that birthed it.

Top: General view of the 1889 Paris Exposition Universelle. Eiffel Tower

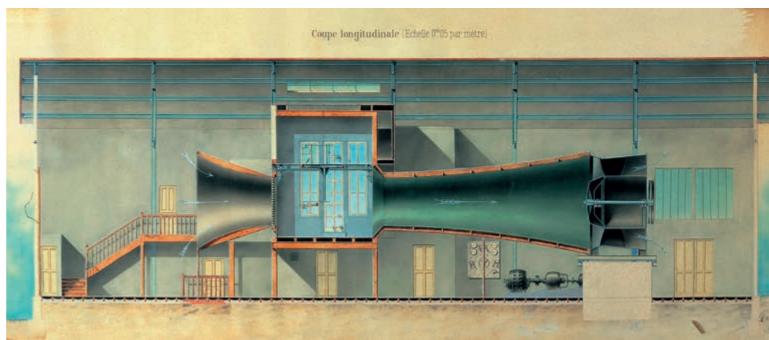








id Eiffel become a builder by chance? Eiffel was there both before the Tower and after it! I will start this short portrait by mentioning some aspects of what he did before building the prestigious monument, and which explain what led him to build it. I will then discuss his efforts to render permanent a structure that was designed to be temporary and dismantled by 1 January 1910. As far as the period prior to the construction of the tower is concerned, we have to start by looking at his training as an engineer, which he underwent between 1853 and 1855 at the École Centrale des Arts et Manufactures, then located in the Hôtel Salé, in the Marais district of Paris, where the Picasso Museum is today. After preparing for the competitive exams as a boarder at the Collège Sainte-Barbe, near the Panthéon, he was accepted at Centrale in 1853, having failed - as is often mentioned - to gain admission to Polytechnique. This turned out to be a stroke of luck. Polytechnique actually trained state engineers and, had he graduated from it, he would probably not have created his company in Levallois or built the structures that made him famous. At Centrale, Eiffel chose to specialize in chemistry. The project for a starch factory that he had to submit



drawings, are still to be found in the École's archives. At Centrale, technical and architectural drawing constituted a large part of the curriculum - more so than the young man would have wished them to be, if we are to believe the letters of protest he wrote to his mother at the time. The teachings at Centrale included a course in architecture, which was a little dated at the time as it was taught by former chief engineer of the City of Paris, Louis Charles Mary (1791-1870), from the Ponts-et-Chaussées, who had held the chair since 1833. Nevertheless, Eiffel learned the orders and properties of building materials from him, and also became acquainted with the main historical buildings of Paris, such as the arcades on Rue de Rivoli, Bélanger's Halle au Grain, and the Marché des Blancs-Manteaux, for instance. In the much more modern and regularly updated course on railways, taught by Auguste Perdonnet (1801-1867), he also heard about the first large metal works erected in England and the United States. Eiffel, who had trained in chemistry, thus found himself committed to a career in construction almost by chance. Soon after he graduated from Centrale, machine and public works builder Charles Nepveu, a relative of Frédéric Nepveu, the architect of Versailles, hired him to help promote a process he had developed to sink tubes using compressed air, and to manage his Parisian workshops on rue de la Bienfaisance and their annexes in Clichy. It was in this context that Eiffel built his first "sheet metal" bridge, on the mythical Paris-Saint-Germain line, and then the famous Bordeaux bridge (1858-1860) which made his reputation. He established his own factory in Levallois in 1866 and went on to build a series of spectacular projects, including the Rouzat and Neuvial viaducts in Auvergne, the inner structure of the Statue of Liberty, the Nice Observatory's framework and, between 1882 and 1885, the Garabit viaduct with its 165-metre-long metal arch. It is less well known that he also created several frameworks for Parisian buildings, including those for the synagogue on rue des Tournelles and the churches

in July 1855 for the graduation exam, along with numerous

of Notre-Dame des Champs and Saint-Joseph.

After inaugurating his tower and meeting with success that is now history, Gustave Eiffel, then 67 years old, gradually retired from business, especially after experiencing some problems due to his involvement with the Panama Canal. In 1893, he withdrew from the management of the Levallois factory but retained some interest in it and in the tower's operation. However, in the thirty years that followed, until his death in 1923, he remained active. Among other things, he tried to find a use for the tower so that it would not be demolished as planned. His most astonishing works were his experiments on air resistance, which led him to play a leading role in the birth of aviation as he collaborated with Louis Blériot, among others. He was also, very early on, one of the main shareholders in the pioneering film company Gaumont. Finally, much of his time was spent purchasing and developing buildings for his five children, including a mansion on Rue Rabelais in Paris, a villa in Beaulieu-sur-Mer and another in Vevey on Lake Geneva. Their style was classical, to say the least, but they were equipped with modern amenities, as shown by the remaining photographs of these interiors which were exhibited at the Musée d'Orsay in 2009. The family periodically held large functions there, where they would have orchestras come to play scores by Debussy and Fauré.

#### Left page

Portrait of Gustave Eiffel by Nadar, circa 1889. Eiffel Tower Collection

The Statue of Liberty's metal framework. Photo credit: DR

The Garabit Viaduct, on the train line from Marvejols to Neussargues. Eiffel Tower Collection

Eiffel leaning casually against the Keops pyramid - *Le Central* n°4 a1. Eiffel Tower Collection / A, de Cours-Après

Top: A cross-section of the Eiffel wind tunnel, which is still in operation in the 16th arrondissement of Paris. The builder was mostly concerned with wind. In 1909, to better study it, he had the first wind tunnel built on the Champde-Mars, which was subsequently dismantled, in 1911.



# THE EIFFEL TOWER, A HISTORY OF COLOUR

By PIERRE-ANTOINE GATIER, member of the Architecture section

he Eiffel Tower is an emblematic and extraordinary building. With its strict economy of means, perfectly suited to its function, and an aesthetic expression adapted to its metal framework, it has become the symbol of 19th century modern engineering and industry. The Tower is both a standing memory of the 1889 Exposition Universelle that showcased the triumph of puddled iron construction in the Industrial Age, and a monument to the glory of engineers and workers at the turn of the 20th century. The prowess of the three hundred metre tower has made it the symbol of Paris and, beyond that, a national symbol.

The 20th painting campaign, with which the Société d'Exploitation de la Tour Eiffel (SETE) entrusted our company in 2017, constitutes a new stage in the history of the Eiffel Tower, as we are also planning to strip the previous layers of paint off and to restore the structure itself. This is a major turning point towards a new approach to conservation.

The painting project in this 20th campaign reveals a technical history of the finishing work, and here again, the mastery of a skill without which metal construction could not have been perpetuated. This effort to repaint the Eiffel Tower is also part of a conservation approach that aims to mitigate the expansive corrosion of ferrous materials.

It also relates to an extraordinary cultural history surrounding the choice of colour and the Tower's place in the larger urban landscape of Paris. The scientific approach implemented in the context of this 20th painting campaign thus integrates an adapted study methodology which combines analyses of historical data with scientific information gathered on site during complementary inspection campaigns<sup>2</sup>.

This method has allowed us to produce a detailed analysis of the history of the Eiffel Tower's painting campaigns, with information on the colours used, their composition, manufacturers, applicators, the reasons for changes in colour, and so on.

## A rigorous study methodology

Being an exceptional heritage project, the Eiffel Tower's 20th painting campaign required a rigorous study methodology to be implemented. To cross-compare all the available data, documentary research was carried out in-house in parallel with surveys and laboratory analyses.

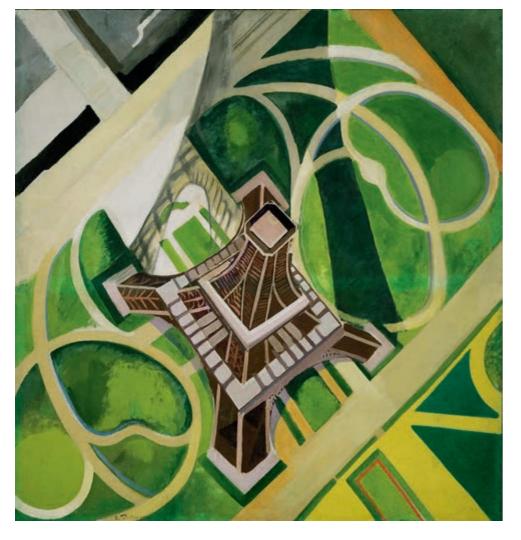
In addition to the reference bibliography from Gustave Eiffel's

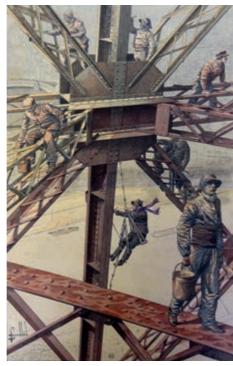
emblematic work, *La tour de trois cents mètres*, to the works published for the Tower's centenary in 1989<sup>3</sup>, the additional research undertaken aimed to gather all the technical data available to characterize the colours by historical state, allowing us to represent those that were successively applied to the Tower as faithfully as possible. To bolster our scientific approach, we initiated constant exchanges between the data collected onsite and the available historical data.

To carry out these in-depth stratigraphic investigations in situ, directly on the Eiffel Tower, we had to extract 80 samples, drawn from all levels of the monument. A summary table was drawn up based on these samples, which allowed us to highlight both recurring and rarer stratigraphic data points, and to isolate each of the building's pictorial campaigns. These elements were compared with textual data from the heritage report in order to corroborate our synthesis of the painting campaigns. A chronological frieze was developed to show the evolution of the Tower's paint layer. To refine our understanding of the paint compounds used, a second stratigraphic campaign was carried out. With help from a scanning electron microscope in a laboratory, we were able to characterize the chemical composition of certain paint layers and establish colorimetric measurements to situate the colours on a standardized colour chart.

- 1- Gustave Eiffel, *La tour de trois cents mètres*, text, Paris, Société des Imprimeries Lemercier, 1900.
- 2 Claire Dandrel, mural painting restorer; Annick Texier, scientist in charge of the Metal Department of the Laboratoire de Recherche des Monuments Historiques (LRMH); Alix Laveau, mural painting restorer.
- 3 Henri Loyrette, *Gustave Eiffel*, Paris, Payot, 1986; Caroline Mathieu (ed.), *1889*: *La tour Eiffel et l'Exposition universelle*, catalogue of the Musée d'Orsay exhibition 16 May-15 August 1989, Paris, ed. RMN, 1989.

Left page: Luis Jiménez Aranda (1845-1928), *A Lady at the Paris Universal Exhibition*, 1889, oil on canvas, 120.6 x 70.8 cm. Meadows Museum, SMU, Dallas. Algur H. Meadows Collection





#### The vision of contemporary artists, a historical asset

In addition to the technical documentation collected, particular attention was paid to written or figurative representations of the Tower and to the way contemporaries perceived it.

Thus, between 1888 and 1902, Henri Rivière produced *Thirty-six views of the Eiffel Tower*, published in the form of a bound book in 1902, with a prologue by Arsène Alexandre printed in a typeface by Georges Auriol. These thirty-six plates, lithographed in five tones, were an opportunity for Henri Rivière simultaneously to pay tribute to both the new Parisian tower and Hokusai, whose Thirty-six Views of Mount Fuji he owned. Like the Japanese master, he played on variations in framing and points of view, from the very heart of the building to its silhouette on the horizon. His use of five tones can be interpreted as a reference to the Eiffel Tower's five gradations. Similarly, the colour scheme used by Henri Rivière, in grey and ochre tones, evokes the Tower's yellow-brown colour that was identified in the survey, where Hokusai used blues for Mount Fuji.

Robert Delaunay also represented the Eiffel Tower on two occasions. He produced a first series of paintings of the city of Paris and the Eiffel Tower between 1909 and 1911, and a second series in the 1920s. Although the two series reflect different influences, the artist used some of the same colours in both series, especially yellow ochre shades. Similarly, discovering that the Tower had been painted in gradations led us to reinterpret the artist's polychrome representations, which turned out to be more realistic than anyone had imagined.

In 1964, as it was gaining protection as a historical monument, the philosopher Roland Barthes (1915-1980) wrote a book about it.

"Look, object, symbol, the Tower is all that man puts in it, and this all is infinite. A spectacle looked at and looking, a useless and irreplaceable building, a familiar world and heroic symbol,

the witness to a century and an always new monument, an inimitable and endlessly reproduced object, it is the pure sign, open to all times, all images and all senses: the unbridled metaphor; through the Tower, men exercise this great faculty of the imagination, which is their freedom; since no history, however dark it may be, has ever been able to take theirs away." <sup>4</sup>

#### On the importance of protecting the structure

As it was built with puddled iron, the Eiffel Tower is regularly painted to protect its metal structure from corrosion. From 1889, in addition to questions of structure and layout, the Tower's design included reflection on the painting process. Design choices were made in the framework itself to encourage monitoring of the development of corrosion by creating means of access. A first layer was applied before assembly to help obtain a perfect protection of the puddled iron elements. Eiffel chose iron minium as the primer. This layer was carefully maintained throughout the assembly process to ensure the paint veil was continuous and the iron was perfectly covered.

"The full importance of painting the Tower should be realized, it is the essential element in the conservation of metal works and the more meticulous the paint job, the longer the Tower shall endure. This consideration was of particular importance for the Tower, because of the small volume of each of its components, their thinness and the exceptional weather conditions to which they were exposed."

4 - Roland Barthes, *The Eiffel Tower*, University of California Press, 1997 (1964).

The paint on the Tower provides both protection and colour. The protection is provided by a succession of layers, which are rich in iron minium. The protocol defined by Gustave Eiffel superimposes a first layer before assembly, then two layers applied to the built structures. Finally, the fourth layer is applied, further reinforcing the anti-corrosive treatment, as he described it as being "highly effective protection". This fourth layer of paint determines the Tower's colour.

#### The Evolution of the Tower's colour

Although the successive colours of the Eiffel Tower were known, the research undertaken has provided in-depth knowledge to characterize these different stages.

The Eiffel Tower was built for a world fair and therefore designed as a temporary structure. It was first given a reddish-brown finish, evoking the shade of iron minium used as a protective undercoat for other contemporary metal structures, such as the Forth Bridge in Scotland, built between 1881 and 1890 by engineers John Fowler and Benjamin Baker. This steel construction, which was inaugurated in the presence of Gustave Eiffel in March 1890, was covered with a layer of red protective paint<sup>6</sup>, a proof of this colouring's popularity in the field of engineering structures at the time.



The Tower was first repainted in 1892, when the original redbrown was replaced with a new range of ochre tones. For the Universal Exhibition of 1900, the Tower was repainted again in yellows. This colour, which gave it a new aesthetic appearance, had been requested by the Universal Exhibition Commission in agreement with Gustave Eiffel.

The fact that these two early repainting campaigns were undertaken less than eleven years apart shows how important it was to Gustave Eiffel that the metal structure be protected, as this was the only way to ensure it could remain standing. Each repainting campaign was an opportunity to experiment with new products and compositions, entrusted to different companies (Société anonyme des gommes nouvelles et vernis in 1889, Georges Hartog & Cie in 1900) in order not only to improve the Tower's protection, but also to offer a new understanding of this singular building.

In 1907, in accordance with the seven-year maintenance campaign schedule, following the warranty periods, a new painting campaign was launched. It followed the methodology

that had already been defined for each of these new campaigns: intermediary layers were usually applied before the coloured topcoat was laid on. The importance of this layer justified the search for a special new product every time, to comply with regulatory frameworks and offer better protection.

At that time, its colour changed to yellow and brown hues, which it kept for almost fifty years. This evolution was related to advances in chemistry and the creation of new compounds for paints. It was at this time, for example, that white lead was gradually banned.

Despite being initially designed as a temporary structure, the Eiffel Tower was preserved specifically for the possibilities it offered for experiments. These applications were scientific at first and soon became military, as they included the creation of a radio network to be used during the First World War.

Acquiring the status of a permanent feature of the Parisian landscape was, of course, an important turn in the Tower's history. This followed the choice of a new paint, called Ferrubron, and of a new yellow-brown colour chosen by Gustave Eiffel himself. This new paint scheme can be interpreted as a transition from the industrial colour (red-brown) to the colour of Haussmannian architecture, with its typical ochre and yellow-brown ashlar facades.

In 1954, as part of the post-war renovation and modernization work undertaken by the architect André Granet, it was repainted in a reddish-brown again, albeit in a lighter shade than the original.

It was granted protection as a historical monument in 1964, with André Malraux's visionary endeavour to extend the notion of historical monuments to the 19th and 20th centuries. This was also the time of new colour proposals for the Tower, ranging from blue to grey. However, to ensure the preservation of the metal structure, ochre pigments remained in use. The new greybeige colour, known as Eiffel Tower Brown, has been used in all repainting campaigns since.

5 - Gustave Eiffel, *La tour de trois cents mètres*, text, Paris, Société des Imprimeries Lemercier, 1900, p. 222.

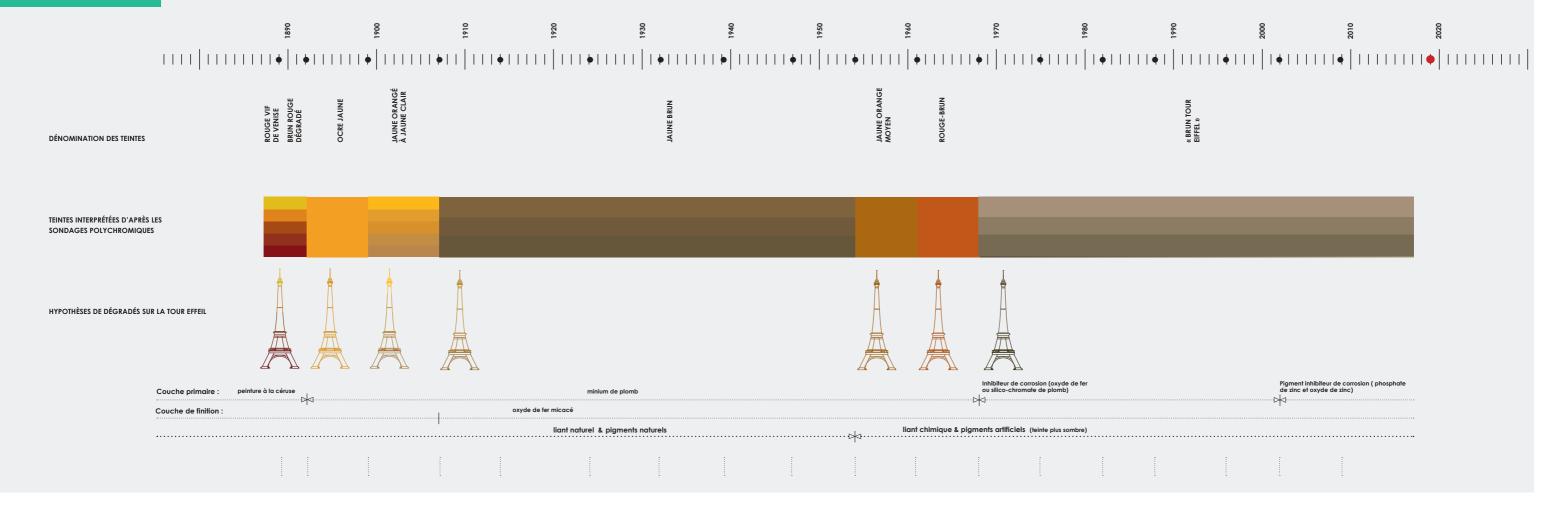
6 - "The Forth Bridge", Engineering, 28 February 1890.

#### Left page:

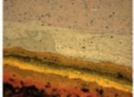
Robert Delaunay (1885-1941), *Tour Eiffel et jardin du Champs-de-Mars*, 1922, based on the aerial photograph by Schelcher and Omer-Décugis (see page 50). Hirshhorn Museum and Sculpture Garden, Smithsonian Institution, Washington DC

Journal of the 1900 Universal Exhibition, repainting campaign for the Exhibition, in shades of grey.

Above: advertising brochure for J. Eschmann & Cie's Ferrubron, circa 1910. The representation of the Eiffel Tower is captioned as having been "painted with Ferrubron in 1907". Colombes-Payen archives, SIAAP









Above: example of a bevelled section, Dino-Lite field microscope x50 and x200 shots. Drawn from Claire Dandrel's study report, January 2018.

Top: chronological frieze. Agence Gatier - SETE, September 2018.

## The contemporary project

The Eiffel Tower's 20th painting campaign also afforded an opportunity to look at the importance of the metal structure's conservation – in addition to the evolution of its colour, the relevance of which exceeded purely aesthetic discussions since it revealed the complexity in the chemical composition of paints. The restoration choices proposed for the Eiffel Tower were informed by historical and scientific knowledge acquired on the Tower's colour during our research. In light of the previous states we were able to determine, we articulated several hypotheses: we could return to the original red-brown colour, although this industrial colour had been discarded as early as 1892; we could use the yellow-brown colour of the time when the monument became permanent; or we could choose the Eiffel Tower brown that has been applied ever since it became a protected historical monument.

In keeping with what is currently held to be true in the field of heritage, where the ability to implement scientific tools directly fuels reflection, the principle of restoring the original colour or conserving the latest ones was abandoned in favour of a global vision taking into account the monument's entire history. This approach, informed by crossing documentary studies with scientific analyses, has allowed us to propose a reference state that respects this emblematic monument along with its history and its evolution.

This reference state was the 1907 painting campaign, a tribute to Gustave Eiffel's choice of a yellow-brown, when the Tower's permanent inclusion in the Parisian landscape first came into consideration. In accordance with Gustave Eiffel's remarkable aesthetic choice, as evoked in *The Three-Hundred-Meter Tower* and confirmed by our survey, the three-tone gradation from the base to the top was perfectly respected.

In addition to the question of colour, a team of specialists<sup>7</sup> had to be formed to develop a paint formulation that could be satisfactory in terms of durability, compliance with current health and hygiene standards, and application methods.

The paint traditionally used on the Eiffel Tower has a high oil content, which gives it a shiny aspect. This reflective surface also slows down the deterioration of the mineral pigments that provide protection against corrosion. The use of a glossy paint now clashes with contemporary techniques for protection from corrosion, which rely on thermo-lacquered paints with a rather matt finish. We chose a paint with an average gloss level of 30%, striking a subtle balance between its historical shine and a more contemporary appearance.

Particular attention was also paid to the new paint's compatibility with the old foundation layers in order to avoid any delamination. We settled for oil paint, as has historically been used, because its longer drying time limits stress on these old layers. The main challenge in this contemporary project is compliance with environmental standards. Since its construction, the Fiffel Tower has been covered with lead paint used in the form of ceruse (a white pigment, a mineral filler obtained through lead decoction) or minium, which protected the puddled iron structure against corrosion. On the Tower, it was replaced by mineral pigments in the 1980s. The environmental enhancement work done on paints for this project has allowed for the reintroduction of substances deemed to be healthier, and which are in fact more traditional, historically used pigments, such as iron oxide. Since 1889, painting the building has been a rope access job. None of the twenty campaigns has strayed from this great tradition. However, far from the image of the painter hanging from his knotted rope, the contemporary worksite uses the most rigorous procedures of rope work, with, for instance, several lifelines always available.

All of us will witness painters on ropes perpetuating this great tradition of repainting, respecting the exceptional choices of Gustave Eiffel. The return of the yellow-brown is a celebration of his masterpiece.

I would like to thank Marion Gauchard-Durand, project director, Margo Piot, architect, as well as Soraya Bertaud du Chazaud and Audrey De Cillia who participated in the project and in the research.

<sup>7 -</sup> The SETEC TPI design office and paint expert Régis Tampere, ACQPA FROSIO

# LIGHTS IN THE CITY OF LIGHT

By FRANCIS RAMBERT, correspondent of the Académie des Beaux-Arts (Architecture section)

ightness was of the essence in a particularly dense city ■ like Haussmann's Paris, a global reference in terms of density. And Eiffel perfectly struck that note. An icon of metal architecture, the Eiffel Tower is as much a technical feat as it is an aesthetic one. Showcasing it was a challenge from the moment it took the stage in the late 19th century. It no longer was a matter of lighting but of illuminating and staging it in the urban space - and specifically in the Parisian landscape.

Long gone are the days of the gas spouts that illuminated it for the 1889 Universal Exhibition when it appeared to the public in its red outfit. For there is not much to say about "the skin" where there is only skeleton to be seen. It is a tower with no proper façade. When the 1900 vintage of the Exposition Universelle heralded the Belle Epoque, the Electricity Fairy accelerated the structure's transformation, all the while highlighting its ornaments. For decades, the tower would be bombarded by light cannons from pits in the Champ de Mars. This lighting was all about power.

It would take eighty-five years for the Eiffel Tower to be shown in a different light - a light shed on it on the night of 31 December 1985, with all gazes on it. Thanks to the sodium lamp system developed by lighting engineer Pierre Bideau, the public could behold the delicateness of the iron lace; the modernized lighting from within honoured the structural play of the beautiful architecture. As a lighting designer, Bideau, who passed away in the spring of 2021, showed the importance of highlighting the soul of a building, beyond the mere use of technology. It is fair to call this architectural lighting. Unlike the Empire State Building, a Manhattan icon where the focus is entirely on highlighting the tip of the skyscraper - recently in the colours of France for Josephine Baker's entry into the Panthéon - the Eiffel Tower allows its entire body to express itself; in no way does it try to hide its author's genius.

In the same years, just a stone's throw from the Eiffel Tower, light was also revealing architecture from the inside. With "Irréversibles lumières" in 1987, the artist Yann Kersalé subtly infiltrated the Grand Palais, another metal building, to reveal the structure and beauty of the glass vault in an enchanting cold colour; there is a Kersalé blue as much as there is a Klein blue. He would later use this hue to bring to light a port heritage in Saint Nazaire, for the first edition of the "Nuit des Docks" in 1991. At the turn of the 21st century, the next new lighting of the

Tower was introduced with an unprecedented spectacle: the

entire building was glittering. It took no less than 20,000 flashing lamps to create this highly cinematic event. In this sequence, the architecture actually disappeared behind the glittering effect, and at the top of the building was a gyrating lighthouse search light that made the Tower visible from up to eighty kilometres away. It bears mentioning that the Statue of Liberty, Bartholdi's symbolic work built in 1885 for the entrance to New York harbour, was also equipped with a lighthouse spotlight sweeping across the sea.

The Eiffel Tower is certainly an icon, and it is also a bearer of messages. It was first used for advertising purposes in 1925 when, in a very Art Deco move, it was made into a support for Citroën's name. It remained spelled out on the structure until 1936, just before the Exposition Universelle of 1937. The event's theme was art and technology, and it gave rise to the new Palais du Trocadéro, whose architectural and urban design arranged a gap between its two wings, a public space that guarantees its extraordinary relationship with the Eiffel Tower, and nowadays makes its an essential sport for selfies.

The Tower is now more metropolitan than ever before; it lives to the beat of great events, both festive and tragic. It is thus the



As far as messages go, the one launched from Ground Zero after September 11, 2001 will be remembered. After the horrific destruction of the World Trade Center towers, which the whole world followed live, two super-powerful beams appeared one evening to bear witness to the horror that had befallen the Twins, past icons of a city forever scarred: an XXL light evocation that truly made their absence present.

As a topic, the illumination of monuments raises questions in terms both of technology and of storytelling. With its beautiful design by Ange-Jacques Gabriel, the Place de la Bourse in Bordeaux plays into this type of narrative on the theme of urban elegance; as does James Turrell's artistic intervention on the Pont du Gard in 2000: with its many chromatic variations, it has its own way of revealing an exceptional piece of Roman masonry to offer a new understanding of an infrastructure turned architecture

More recently, the Agbar Tower, designed by Jean Nouvel with an inclination towards pixelation and built on one of Barcelona's most strategic squares, has also been the scene of light shows at night. On occasion, it has been dressed in red, in harmony with the Sagrada Familia, to help in the fight against myopathy. At other times - when the Barça won the Champions League, for instance - the tower has been decked out in the famous Catalan club's blaugrana colours.

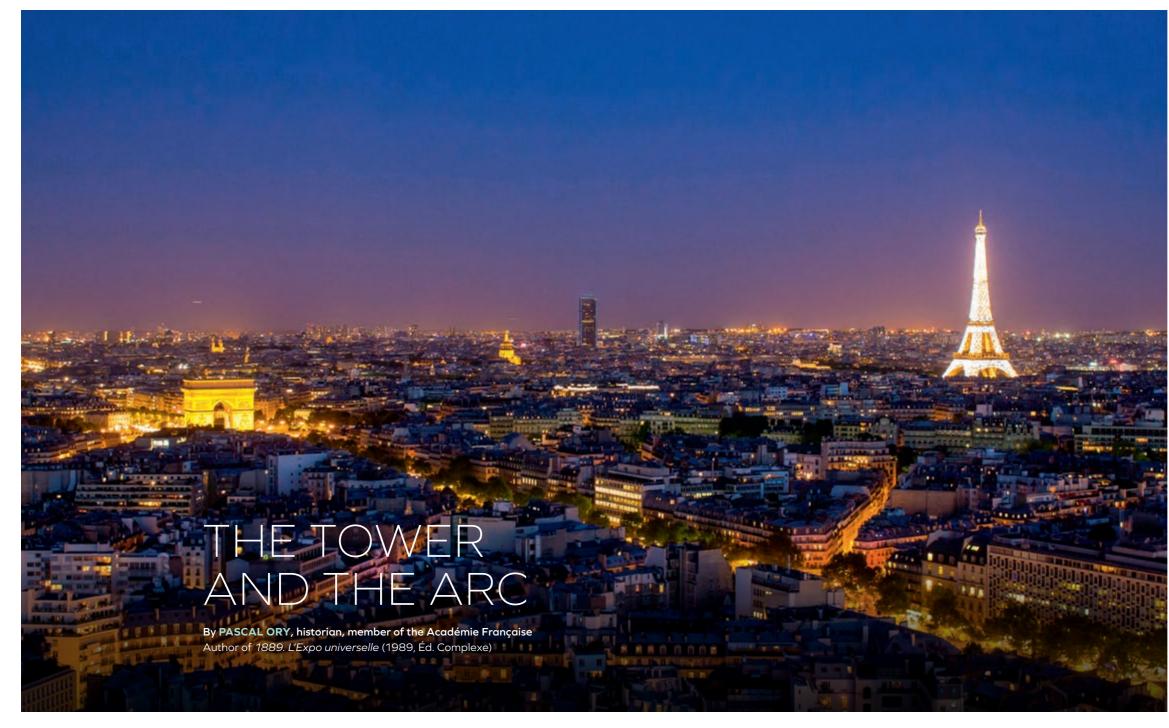
In a completely different context, the Erasmus Bridge in Rotterdam, the work of Ben van Berkel, also benefits from a lighting scheme that highlights the design of an architecture who, over the Meuse, does not play with lace, but rather plays like a harp in the northern landscape.



Left page: Georges Garen (1854-1913), Embrasement de la tour Eiffel, 1889, chromolithograph. CCO Paris Musées / Musée Carnavalet







Night view of Paris with the Arc de Triomphe and the Eiffel Tower. Photo credit: Alamy

he Eiffel Tower's status as a technical feat is taken as an undisputed fact. Some have even - rather unwisely - seen in it the Waterloo of architects or, so to speak, the Austerlitz of engineers. It has become the symbol of Paris, even of France, and writers and artists alike have dreamt it, transformed it, sublimated it. However, by constantly looking forwards and projecting it into the future, we have forgotten the function assigned to it by the organizers of the 1889 Universal Exhibition, for which it was built. It was to be a triumphal arch to the glory of the new regime, of the democratic and - distinctly - secular French Republic.

In 1889 its location – which had been all but forgotten by the time the exhibition closed - said it all. The Tower was located on a strategic route in the official perimeter, directly in line with the previous Universal Exhibition's main building, the Palais du Trocadéro. The latter building had been designed in 1878 as the first great piece of architecture dedicated to what the following century would call "cultural democratization", with two museum wings and a large hall for popular shows and concerts. Throughout the Exhibition, a considerable proportion of its millions of visitors repeatedly passed beneath the Tower.

Subsequent changes in the Tower's functions and symbolization - to which security constraints around its access points have recently been added - removed this feature. The Tower was undoubtedly designed to be contemplated from a distance, and certainly to be ascended as well, but it was also meant to be crossed on foot.

This is where the ultimate significance of the building lies: the "300-metre tower", as it was officially called in the programme made public in 1886, did not only set a height record which - by design - allowed France to beat the new German Reich's 1880 record: the 157-metre-high Cologne cathedral. It was also intended, if not to be seen as an explicitly republican monument, at least to be understood in the context of the Champ-de-Mars where it was placed in a conversation with two other feats of metallic architecture, the "Dôme Central" and the competing "Gallery of Thirty Meters".

It was no coincidence that the programme's initiator was Édouard Lockroy, then Minister of Trade and Industry who acted as the Exhibition's general commissioner. Lockroy was a "radical" who had been described as sitting on the far left during the Second Empire - and, although not a Communard himself,

was a sympathiser of the Commune - yet had been on the road to moderation from the moment the Republic had come to power (1877-1879). His inclusion in the new government formed in early 1886 was a clear sign that the majority was turning towards the left. Having dreamed in his youth of being an artist, Lockroy was seduced by Eiffel's metal project and immediately demanded that the ad hoc commission validate it. The choice of metal as the main material and an engineer as project manager was in itself a manifesto, in direct connection with the political purpose of the Exhibition: to celebrate the centenary of the French Revolution - a symbolic choice that would ipso facto cause most of the monarchies of the time to decline the invitation.

In light of these initial conditions, the Tower's form and function should be viewed from a specific angle: as a positive response to the negative monument that stands at the top of the Champs-Élysées, the Arc de Triomphe. For good republicans in 1886, the latter remained an embarrassment: it had been ordered by Napoleon I and built for the most part under Louis-Philippe, and even the Second Empire had never come around to crowning it with the imperial quadriga which should logically have | 37 completed it. The year before Lockroy's decision, the Arc began to serve the new regime, as it hosted Victor Hugo's coffin for a whole night before it was brought to the Panthéon and reopened for the occasion. However, this was not enough to redeem it lastingly, and the Arc remained politically cumbersome until the First World War. After the War, the Unknown Soldier (1920) and the Eternal Flame (1923) definitively established the building's patriotic function in the people's minds, whereas the July Monarchy had only arranged ambiguous symbolism with it (*The departure of the volunteers of 1792*).

In response, the Eiffel Tower, the arch of the Centenary Exhibition, had all the characteristics to make it, all things considered, the Arc de Triomphe of modern times. Where the squat masonry of the Corsican Ogre's Arc closely - or, given the atmosphere in imperial times, should we say "servilely"? - copied a model from Antiquity, the Tower offered the public of 1889 the transparent and geometric mesh of its structure, open for all to see. Where the Arc, haunted by the ghost of the Imperator, sang of bellicose ardour, the Tower boldly rose towards a sky that could be assumed to be free of metaphysics, albeit not of electricity; a platform for Icarus, facing a pedestal for Augustus. Finally - and although this has become the least visible sign, it is the clearest -, where the Arch displayed the names of 660 military leaders (without any mention of their soldiers, all of whom the sole Unknown Soldier would come to represent in the 20th century, in a sort of paradoxical democracy of the dead), the Tower listed quite a different set of names, These names were also from an elite, but a peaceful, secular and rationalist elite, composed of seventy-two scientists, technicians or industrialists, from Lavoisier to Bichat, Daguerre to Schneider. They were all French, as they should be, and, of course, all male. Nearly half of them were alumni of the École Polytechnique, a product of

The names in this virtual Pantheon were painted in gold letters on the first floor and can still be read to this day, although one would need good eyes and a mind willing to look at the Tower as a "site of memory". It is therefore safe to assume that the vast majority of the Tower's visitors see none of this. It touches on the limits of the Promethean project of this generation, the generation of Darwin and Broca, of Renan's *Life of Jesus* and Eugene Pelletan's 19th Century Profession of Faith. As the aforementioned Panthéon-dwelling author who spent that night of 1885 under the Arc de Triomphe famously wrote when confronting the



old, oral and dogmatic medieval culture with the new, written and liberal modern culture: "This will kill that". Considering the fate of the 1889 Arc de Triomphe, there was definitely some truth to this, both in the intuition and in the result. A testimony to this is the fate of the artists' and writers' "protest" against the Tower – to whom Lockroy's response was tongue-in-cheek -, as opposed to the visitors' vote and the Tower's reception in the press. It was a triumph, as were the autumn elections for the Republican government, after the year had got off to a disastrous start against General Boulanger. There is no doubt that the laudatory dimension of Eiffel's enterprise transpires, to this day, in the permanently renewed universal triumph of this pure demonstration of human "genius" - tracing back to the root of the word engineering. But everything here remains implicit. From the republican calendar to the Goddess Reason, the experience of the Revolution, whose values the Exhibition celebrated "as one", as Clemenceau would soon say, had already shown that there was nothing for the modern world to gain in a tit-for-tat competition with the old cultural regime.

The people of Lyon know something about this, as they have no doubt forgotten the philosophical significance that some of the city's republicans gave to the erection, a few years later, of the "metallic tower" opposite the Fourvière basilica. In this respect, it is revealing that, directly under the Eiffel Tower, between its four legs, the Exhibition installed a sculpted fountain whose programme could hardly be any more explicit: Night attempting to stop the genius of Light striving to illuminate the Truth. Be it its position, its dimensions, or its style, everything about this work was bad, and its author Francis de Saint-Vidal has deservedly been forgotten. In the end however, it was Eiffel's tower that, in its own way, achieved the true allegory of Progress in the eyes of the world.

The city of Lyon seen from Fourvière, with its metal tower inspired by the Eiffel Tower in the foreground, 1917.

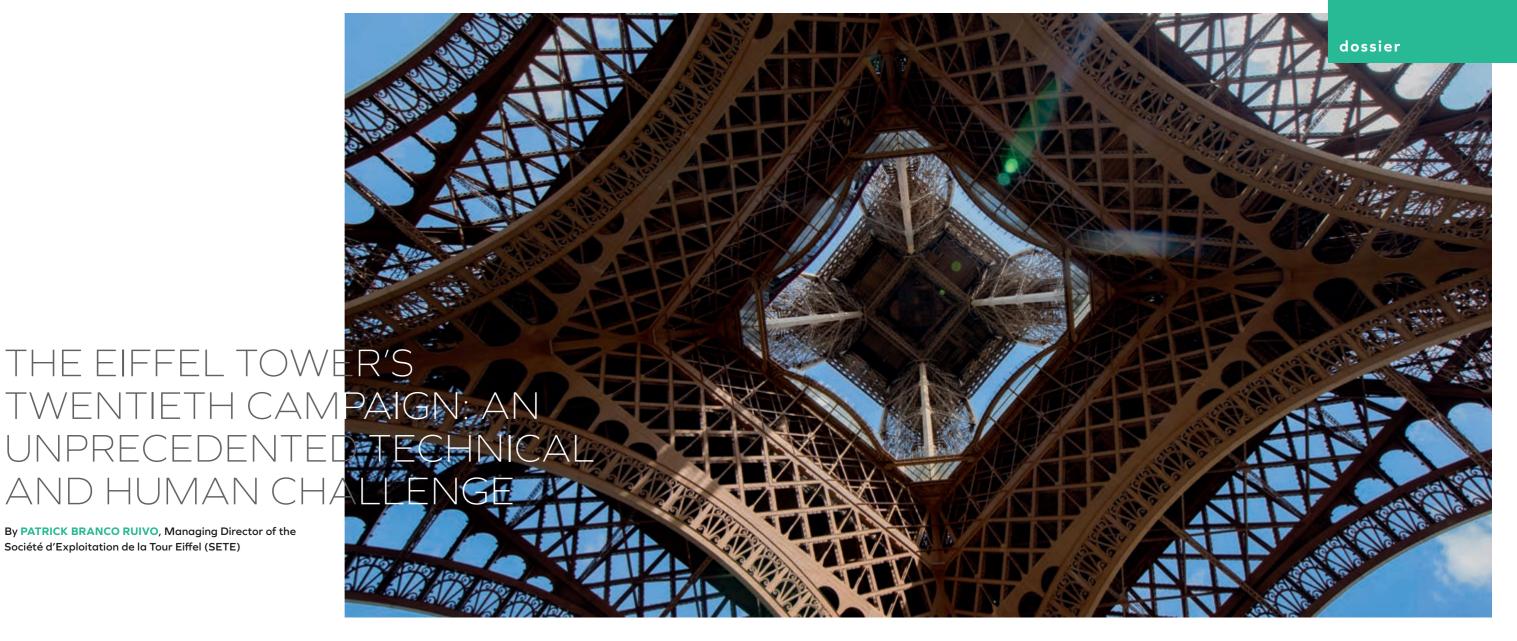
Photo credit: Agence Rol / Gallica BnF



# Eiffel Tower for sale an ambitious scam

ith the death of Gustave Eiffel in 1923, the Eiffel Tower lost its main protector and promoter. Upon learning in the press of financial difficulties in the monument's operation due to expensive maintenance and a drop in attendance, Victor Lustia, a conman with extensive experience in France and the United States, elaborated an almost plausible scenario. He claimed that the owner of the Tower - the City of Paris - intended to close and dismantle it, and was therefore putting its iron on sale. Actually, Gustave Eiffel had been guaranteed the Tower's continued existence in the 1910s, not only for its iconic status since the 1889 Exposition Universelle, but also for its strategic functions as a radio transmitter and receiver. Lustig's plan was perfectly constructed though. He posed as a senior Parisian official, even going so far as to forge official letters to contact scrap metal companies and arrange a meeting. Scrap dealer André Poisson took the bait and went to an auction meeting with other potential buyers who were in fact Lustig's accomplices. He thought he was buying the Tower's 7,300 tonnes of iron, and understood the swindle only once it was too late and his payment had been cashed in. He was too ashamed to report Lustig, who had fled to Austria. Some time later, Lustig tried to sell the Tower again, but this time he failed and was forced to leave France again. He went into exile in the United States, where he continued to con dozens of people until he was arrested and jailed in 1935. He died in 1947 in the notorious federal prison of Alcatraz.

Top: Victor Lustig, centre, being questioned in the United States as part of a US counterintelligence investigation (date and location unknown). Photo credit: *Evening Journal* 



By PATRICK BRANCO RUIVO, Managing Director of the Société d'Exploitation de la Tour Eiffel (SETE)

he Eiffel Tower is an emblematic building and a symbol of Industrial engineering. It is the memory of the Universal Exhibition of 1889, which staged the triumph of the industrial century's puddled iron constructions.

Puddled iron can last almost eternally, provided it is repainted regularly. Paint is therefore an essential element in the conservation of the Tower, allowing it to fend off the effects of rust and

The monument is repainted every 7 years on average, and is currently undergoing its 20th painting campaign. This campaign is a key stage in its history since it also involves stripping off the previous layers and restoring the structure. Like everything else related to the monument, this project has a mythical character and echoes the very dimension of the monument.

#### For the first time, a stripping of the paint base

After 19 successive campaigns, the paint has reached a thickness of up to 3 mm and an estimated mass of 350 tons. Stripping it is primarily part of a process linked to the conservation of the monument. It is intended to improve the new paint's adhesiveness and durability.

#### An unusual construction site

In total, about 100 workers are working on the current campaign, which is also an opportunity to run detailed verifications of the structure's condition.

The 20th painting campaign will also make use of traditional techniques, and especially hot riveting. Riveting is the oldest method used to join metal parts together. The Eiffel Tower is a perfect example of it, with 2,500,000 rivets, 2/3 of which were assembled on site!

## Reverting to the historical "yellow-brown" colour

While the 20th painting campaign is innovative in many respects, it also made the memorable choice to revert to the "yellow-brown" colour. This is the last colour chosen by Gustave Eiffel himself, with a view to ensuring the Eiffel Tower's perennity and its belonging in the Parisian landscape.

Initially, when it left the workshop, the monument was Venice red, according to Gustave Eiffel's wishes in 1889, as this colour was then deemed to be the most effective to avoid rust. The monument subsequently became yellow in 1899 and then "Eiffel Tower brown" from 1968 to the present day. The "yellow-brown" colour, which is quite similar to bronze, was specially designed for the Tower and reserved for its sole use. It came in three shades, from the lightest at the top to the darkest at the bottom, to ensure a uniform perception of the colour against the Parisian sky and to give the monument its slender appearance.

# A scientific approach highlighting the history of the Tower's

The Eiffel Tower has been protected as a Historic Monument since 1964. The SETE therefore tasked the agency of chief architect of the Monuments Historiques, Pierre-Antoine Gatier, with conducting a historical study of the Eiffel Tower's paint.

The scientific approach consisted of a detailed study combining an analysis of historical data with scientific information gathered on site. This method yielded precise information on the history of the Eiffel Tower's painting campaigns and the colours used, their composition, their manufacturers, the reasons for changes in colour, and so on. Particular attention was paid to characterizing the colours by historical state, thus enabling a faithful representation of those successively applied to the Tower.

## A campaign of stratigraphic soundings to identify all the pictorial layers

Stratigraphic investigations were carried out on the Tower by means of 80 samples drawn from all the levels of the monument. The photographs obtained identified all the pictorial layers. Several shades, with sometimes two or three values, were thus identified to characterize each of the Tower's pictorial campaigns.

#### Defining the shade

Choices for the restoration protocol were informed by the historical and scientific knowledge acquired about the Eiffel Tower's colour. The protocol was established with respect to the heritage provisions for this emblematic monument, its history and its evolution. Thus, a reference state for the colour of the Eiffel Tower was proposed, that of the 1907 to 1954 period, with the yellow-brown tone.

The Eiffel Tower seen from the forecourt in low anale Photo credit: SETE

40 41

# THE EIFFEL TOWER IN ART

By LYDIA HARAMBOURG, correspondent of the Académie des Beaux-Arts (Painting section)

The Eiffel Tower, both a mythical symbol of Paris and an image of modernity and the avant-garde, has inspired artists ever since it was erected in the capital. While the technical and engineering prowess of its construction were unanimously recognized, there was however less consensus as to its aesthetics. Yet it was precisely the audacity, insolence, and provocativeness of the Tower, in a capital where the classical spirit prevailed, that seduced painters who were themselves in the process of revolutionizing visions of the world through their pictorial research.

From the launch of its construction in 1887, the Iron Lady generated such controversy that writers and painters, some of whom were members of the Académie des Beaux-Arts, signed a petition to demand its cancellation. The construction work nevertheless went on, and a whole avant-garde enthusiastically welcomed the Tower, seeing it as the spearhead of progress and modernity.

History painter Paul-Louis Delance immortalized a view of the almost completed Eiffel Tower on the Champ de Mars – turned into a construction site – shortly before the Universal Exhibition of 1889 (Musée Carnavalet).

From 1909 onwards, the Tower inspired Robert Delaunay to produce no less than thirty representations. In his first paintings, he used his pictorial experiments and formal solutions to mentally recompose the fragmented motif in a dynamic that was hailed as a complementary approach to the analytical and static reflections in Braque's and Picasso's Cubism. The colour red gives its name to *La Tour Rouge* 1911-1912 (New York, The Salomon R. Guggenheim Museum) and echoes the artist's research into colour, prismatic deconstruction and simultaneity, which Apollinaire described as "orphism": *L'Équipe de Cardiff* 1913 (Paris, MNAM). The view of the Eiffel Tower

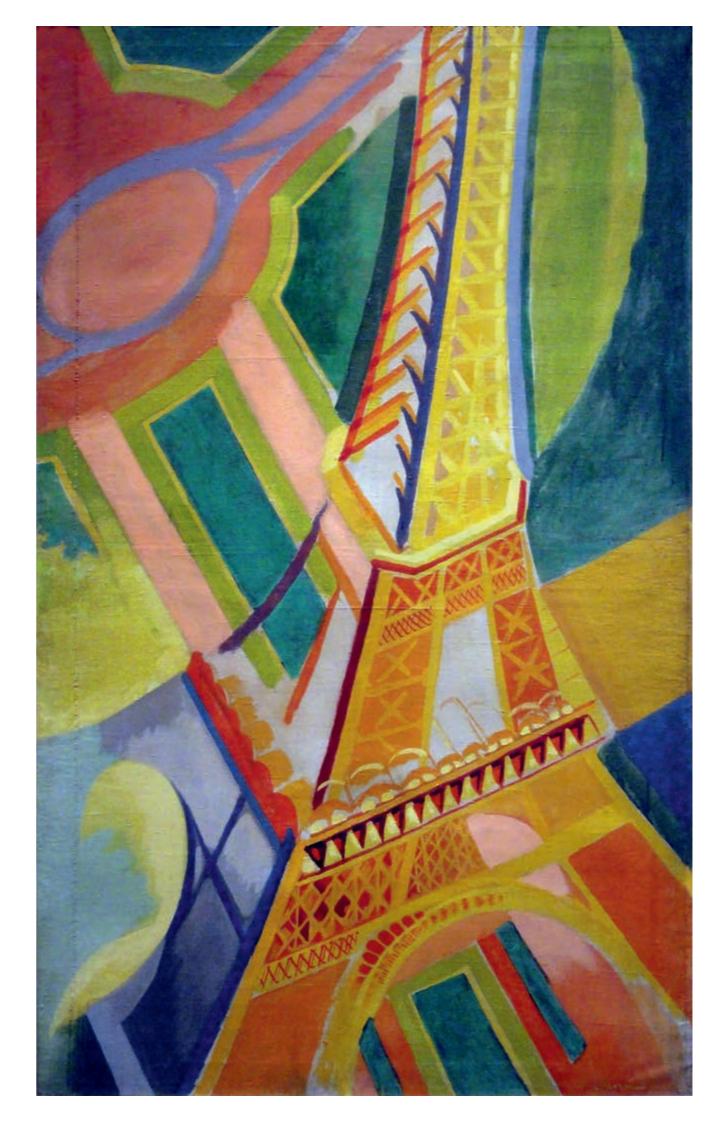
within the broader subject of *The City* 1910-1912 (Centre Georges Pompidou) is a prime example of continuity being transformed for a renewed approach to figuration. At the historical reconstruction of the Section d'Or in 1925, Delaunay showed his painting Tour Eiffel, formerly exhibited in room 41 of the 1911 Indépendants. With it, he intended to demonstrate the vitality of Cubism in its decorative applications. In the mid-1920s, when writings on the history of Cubism started to be informed by Kahnweiler's neo-Kantian analysis, Robert Delaunay became aware of the historical value of his works and considered publishing an album of lithographs based on his major early paintings, accompanied by a text by J.K. Huysmans. The album was however never published. Naturally, La Tour is among the only three plates produced, along with the two other themes that were the focus of all his work at that time, Saint-Séverin and Fenêtre sur la ville. These black and white lithographs were a new look at his pre-war works in a style that had evolved towards decorative synthesis in response to the return of a classical language.

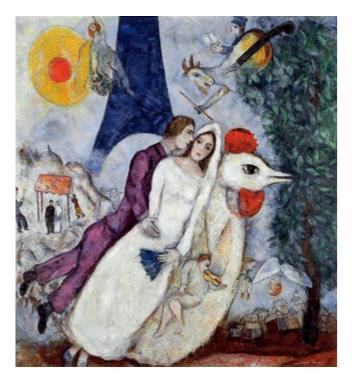
A few years later, the recurring theme of the Eiffel Tower would feature again in a series of canvases that Delaunay painted between 1922 and 1930. The drawing is assertive with firm, uninterrupted lines in plunge or low angle composition directly inspired by photographs (300 metres of depth enter the canvas), and where the constructivist aesthetic is revisited with an "art deco" spirit – bringing renewal to the Tower's slender silhouette. All of these points of view were graphic propositions that continued to fascinate the painter. Delaunay's lithographs for Joseph Delteil's novel, Allô, Paris! displayed a characteristically stylized figurative vision. Three of his plates, La tour Eiffel, La Place de l'Étoile and Le Pont aérien, were exhibited at the Vavin-Raspail

Robert Delaunay died in 1941 at the age of fifty-six, leaving an oeuvre that contained many views of the Eiffel Tower, which shows the role the monument played in a body of work built on graphic questions and premises to which its structure provided answers. Yet critics, who are easily swayed by the ebb and flow of fashion, described Delaunay's last paintings as "cold postcards and souvenirs" (Munich exhibition 1985). Many other views would follow, but without Delaunay's talent, opening the way to a whole range of popular imagery.









Let us return to the pioneering years with the inductive currents that wrote the history of art. In 1889, Georges Seurat, the initiator of pointillism, portrayed *The Eiffel Tower* (Fine Arts Museum San Francisco) with a myriad of juxtaposed coloured dots whose vibrant luminous swarming, absorbed by the sky, foreshadowed its actual illumination. This sense of lightness, of an absence of gravity, would become typical of the many representations in watercolour and oil that his student Paul Signac would paint a few years later.

In 1919, Pierre Bonnard painted a panoramic view entitled *Le Pont de Grenelle* (former Georges Renand collection) in which the Tower is tiny. Around a sonorous purple enveloping it on the horizon, warm tones introduce a lyrical luminosity that completes its poetry.

In the École de Paris, Chagall, one of its illustrious members, painted scenes in which he mixed personal elements with the symbols of Paris, where he first set foot in 1910. The Eiffel Tower shares a canvas with the village of Vitebsk, where the rooster and the goat fly in the Parisian sky and accompany the eponymous bride and groom (*Mariés de la tour Eiffel,* 1938-1939, Paris, MNAM) in a happily-forever-after celebration of colour. The Tower remained part of the painter's world from then on, and even found its way onto the ceiling of the Paris Opera House, which he painted in 1964. On the 220 square metres of surface area, the Tower seems to be running away under

Top: Marc Chagall (1887-1985), *Les mariés de la tour Eiffel*, 1938-1939, oil on canvas, 150 x 136.5 cm. Centre national d'art et de culture – Georges Pompidau

Right: Bernard Buffet (1928-1999), *Tour Eiffel*, circa 1990, lithograph,  $57.8 \times 76 \text{ cm}$ 

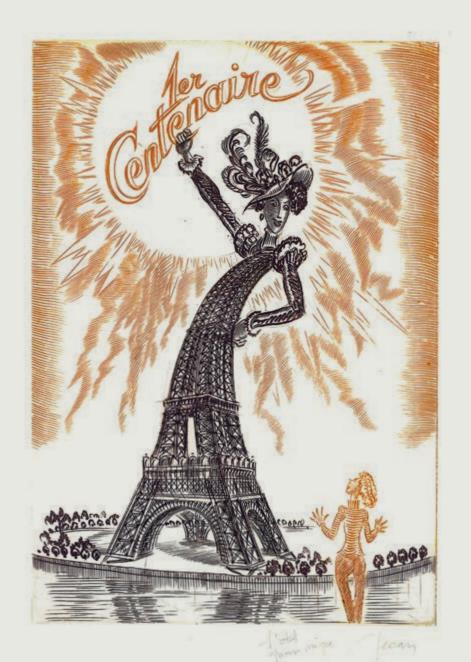
the sonic assault of colours and music played by buskers who, fittingly, seem to be presenting a ballet.

The Eiffel Tower was quickly assimilated into the Parisian landscape. In his reprise of the Thirty-Six Views of Mount Fuji, the painter-engraver Henri Rivière paid tribute both to Hokusai, whose xylographic suite he owned, and to the Parisian Tower. Between 1888 and 1902, he produced Les Trente-six vues de la tour Eiffel in the form of a bound book with a prologue by Arsène Alexandre. Rivière used a wide variety of points of view, along with diverse visual subterfuges chosen according to the framing. He played with close-ups and details (the beams), or widened the panorama until the Tower became Lilliputian. Like an urban vestal virgin, it watched over the unloading of barges and carts on the quays. Yet throughout this game of hide and seek the Tower was always somewhere to be seen. In views by the Dufy brothers, Raoul and Jean, and by Marquet and Utrillo, it no longer seemed to be the main subject. Absorbed in successive levels of depth that extend the space, it became the memory that had to be kept of Paris.

From the outset, its openwork structure invoked movement and vibrant, glimmering light, to justify this "useless beauty" as an identifying motif of modernity.

In 1954, Nicolas de Staël returned to the subject and used the Eiffel Tower as a motif in his painting, which reconnected with "the foundations of the world", as Cézanne had put it. This 1954 painting (Pierre Lévy collection, Musée de Troyes) expresses the violent tension that inhabited the artist at the time. Between grace and gravity, he put the architecture's grandeur through the abyssal window of the canvas. For him, no detail altered the solemnity of "true painting, [which] always tends towards all





## Albert Decaris

The engraver Albert Decaris, a member of the Académie des Beaux-Arts, produced an album entitled Le centenaire de la tour Eiffel just before his death in 1988, of which no institutional library has any trace (not even the BnF) although it is included in the artist's catalogue (2005). The album was published post-mortem by his heirs. The edition printed at the Moret workshops consists of 23 engravings and a frontispiece. reproduced in the catalogue as vignettes, as well as two large plates. Decaris is a Prix de Rome winning burinist, famous for his fine craft served by unparalleled virtuosity in the details of his allegorical compositions, be they portraits or views of Paris. In the latter, he invented humorous scenes in which the Eiffel Tower reigned sovereign.

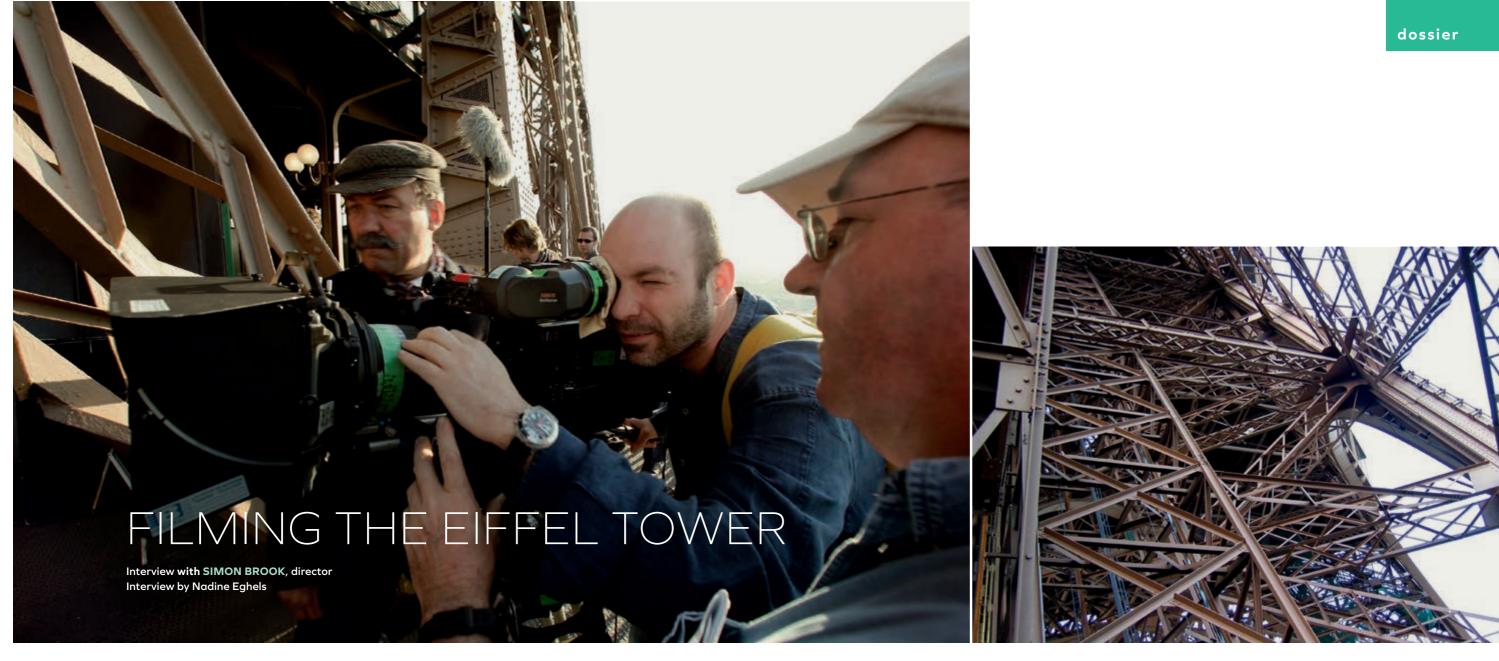
aspects, that is to say, towards the impossible sum of the present moment, the past and the future".

This is what the Eiffel Tower was and remains: an inspiration that has never ceased to bring renewal to the repertoire of artists by drawing, from its source, an imagery that has become universal. According to Chagall, the "City of Light" had found its symbol. And since art is destined for eternity, it carries Paris' "lapidaire" history with it; the history of a capital that has transformed its image over the centuries without ever forsaking its past. Those ordered testimonies to the passage of time were what seduced Bernard Buffet. The painter, the youngest academician, elected in 1973 at the age of forty-six, could well have spoken Paul Valéry's words: "Pondering Paris? The more one thinks about it, the more one feels pondered by Paris". In 1956 the artist painted a series of landscapes of Paris for the David-Garnier Gallery's annual exhibition in the city. These views of Paris contained as much thought as they did paint, and their realism was a supreme challenge. The Eiffel Tower appears as a seamark spiking into the sky with scalpel-sharp precision, its identity lying in its language, to which the grisaille adds rectitude in drawing. Buffet's painting is also the expression of a discipline which constitutes one of the phalanxes of his thought, where a perfectly accomplished craft allows him to resist the appeal of any restriction. Buffet left several portraits of the Iron Lady, a

regular feature in his (drypoint) engravings and in his colour and black and white lithographs alike.

More recently, the painter and engraver Jean-Baptiste Sécheret painted the Eiffel Tower on a slate (see pages 20-21). Mineral, metallic, powerful in its monumentality, displaying the strength of its tutelary past, it reigns over its future. Amidst a body of work in which the industrial wastelands of Mondeville and views of New York, of the Roches Noires and Trouville, and other places celebrate the Euclidean force of an architecture that embodies serious art, the Eiffel Tower seduced the artist. In another view – lithographed based on broad charcoal strokes, this time – the Tower is hieratic, playing with its transparencies with the voids of its beams, impatient to conquer once again the immensity that beckons it out of its frame.

Painters and engravers grasp its silhouette, let themselves be taken in by its image. This seems to be the Eiffel Tower's lesson.



Above: Simon Brook and his team shooting The True Legend of the Eiffel Tower.

On the right: the metallic, geometric structure of the Eiffel Tower. Photo credit: DR.

Nadine Eghels: In 2006, you directed *The True Legend of the Eiffel Tower*. How did you come up with the idea for this film, which is somewhere between legend and truth?

Simon Brook: This proposal for a drama-documentary was put to me by the producer Jean-Pierre Dusséaux, with Pascal Lainé as scriptwriter. I immediately accepted. I had been going to the Eiffel Tower regularly since I was six years old, I was fascinated by it, in love with it. The real challenge was figuring out how to tell the story of its construction, where to start and where to stop, how to account for the stakes of the time and for individual destinies, all in ninety-five minutes. Pascal Lainé did a colossal amount of research and, together, we concocted the story of the Tower's design and construction. It should be noted that Eiffel was initially focused on bridges and viaducts, and opposed this project. The Tower had been designed by two of his engineers, Emile Nouguier and Maurice Koechlin, who imagined transposing their steel assembly technology onto a 300-metre tower. They wanted to take part in the contest, and Eiffel agreed, provided they did so outside office hours; so it was pretty noncommittal for him! The two engineers behind the project were subsequently forgotten, as Eiffel bought their rights for a symbolic sum.

N.E.: What were your creative choices for this film? Absolute fidelity to reality?

S.B.: I don't think that reality exists, everything is always subjective. There are of course factual and historical data. While opting for total fidelity to the archives that we could find, we invented a story over three generations to recreate the context during that period of great societal change through fictional characters – though not entirely, as the dialogues are based on verbatim reports of the time. As we had photos of the construction, I created the character of a photographer accompanying a journalist who tells the story in the first person.

N.E.: How did you use these photos in the film?

S.B.: We proceeded by inserting the actors into the period photos to make them verisimilitudinous. The narrative is fuelled by these photos, which present the characters in their historical setting, punctuating the scenes played by the actors. The narrator is a journalist who is interested in all current events, and he is involved in everything from the Pigalle slums to the tremendous advances in the steel industry. It was he who would later cover the trial against Eiffel during the Panama Canal scandal. It was a huge scandal, and Eiffel would subsequently retire from public life. The Eiffel quay was renamed, and there was talk of dismantling the Tower. Fortunately, it withstood that threat!

N.E.: How do you film the Eiffel Tower?

S.B.: The film format is historically wide and not very high, and the Tower is high and not very wide, so to give an idea of its height you have to stand very far away and you can't see much of it, and if you stand very close you lose sight of its dimension. We solved this problem by using photos: a frame inside the frame allows you to switch from a horizontal to a vertical dimension. And when you are on the Eiffel Tower... you don't see it! You can see Paris below, and the capital has changed so much that we couldn't possibly take aerial views of it. Whether you are at the top or at an intermediate level, the background is the sky, which is generally white. So we rebuilt part of the Tower in the suburbs of Paris. Whether you're standing at a height of ten metres or three hundred metres, the background is the same: white sky.

Our actors were fortunately willing to learn about the methods of assembling metal parts, and they went to foundrymen to learn how to make rivets, heat them, drive them... all on a high platform. It was an artisanal endeavour, in which everyone was fully engaged.

46 | 47



Assembling a structure in a foundry, a copy of a part of the Tower, for the purposes of the film

Photo credit: DR

N.E.: How was the film distributed?

S.B.: The film was first broadcast on Canal + and then on various television channels... and also all over the world. The Eiffel Tower is the image of Paris, and something of an object of French pride. Let's not forget the important role it played during the war thanks to the radio relays installed at the top! And then there is the beauty in the gesture... A gesture with no function. A tribute to the technological and industrial progress of France at the time.

N.E.: The film's music was composed by Laurent Petitgirard. How did this collaboration come about?

S.B.: I couldn't imagine this film not having an original score. You can't make a good film with pre-existing music. I was lucky: when we asked Laurent Petitgirard, he became fully involved in the project as a true artistic partner. Because what makes the Tower come alive is not just its image but also the music, the sound editing and mixing. We needed a score that would organically participate in the film and be like the Tower: new, original and surprising. I wanted it to reflect the upheavals of the time, to be fully fleshed music, not just something light-hearted and joyful. Laurent Petitgirard's composition perfectly captured this.

N.E.: When did the composition take place?

S.B.: We met before I started shooting, to talk about the spirit of the film. When I had a first draft of the editing, I showed it to him, then the musical composition was done in parallel and in connection with the editing. I wanted the emotional charge to come through the music... the enthusiasm as well as the doubts,

and the challenge. We were in constant dialogue. When I changed something, he adapted the music; he was always ready to go the extra mile to strike the right tone both for the film as a whole and for the sequence in particular. It's more difficult for the composer because they don't have an overall vision of the film. They have to anticipate how it will fit into the whole film while also being right for that particular moment: to highlight joy with something rather light or, on the contrary, to dive into the gravity of the moment. The music was written sequence by sequence without him having seen the entire edit, but he had read the script carefully, and we talked a lot! I also have vivid memories of the recording, by a symphony orchestra which he conducted, obviously. It was magical.

N.E.: Was the film constructed during the editing process?

S.B.: Not exactly. It's a documented fiction and the script was already very precise. We had very little shooting time, and we also had to plan for special effects work and so on. So we didn't shoot any extra roll as you typically would for a documentary. I learned a lot from filming the Eiffel Tower... If I were to film it now, I'd probably take advantage of technological advances; I'd use more computer-generated images and so on. But here, I wanted to tell the story of the Tower as something of a tale. I wanted it to be accessible to all audiences and to arouse the kind of fascination I'd felt as a child. I focused on the adventure of the Tower, not at all on the private life of Eiffel. It was an incredible epic and it's still the stuff of dreams!



Image from the film Eiffel (2021) by Martin Bourboulon, with Romain Duris and Emma Mackey in the main roles. VVZ Production - Pathé Films engineers. The film rightly debunks this idea. It's a movie, so romance can be expected. Here it's based on Eiffel's lifelong relationship with the daughter of an entrepreneur from Bordeaux, Jean-Marcellin Bourgès, whom he met during his first major project, the construction of a large railway bridge over the Garonne between 1858 and 1860. Is it fiction or history? It doesn't matter, what does is that it allowed scriptwriter Caroline Bongrand and director Martin Bourboulon to imagine a thread that would allow them to take their audience to two crucial periods of Eiffel's career: the construction of this bridge in Bordeaux, barely three years after he graduated from the École Centrale in 1855, and of course the construction of the Tower, from the first blueprints to the inauguration in 1889.

Beautiful colour reconstructions - which contrast with the black and white photos and drawings of the past - realistically and often impressively show Eiffel at work, played quite convincingly by Romain Duris. The film also shows the work that was done on the Tower at the Levallois factory. And there are striking views of Paris at the time, especially those of the Champ de Mars with the Tower under construction, and in the background Jules Bourdais' old Trocadero and even the smoking chimneys at the Javel factories. The film also shows the preliminary experiments conducted on air resistance or the effect of lightning, demonstrating that the Tower would function as a gigantic lightning rod. In the film, Eiffel's meticulous use of a system of underground caissons using compressed air for his foundations gives us in a dramatic, intensely noisy scene. The advantages of riveting, which allows for rapid assembly of pieces, something like a meccano set, are also highlighted here, albeit briefly. And precisely because of the use of riveting, the difficulty of dismantling the building before 1910 as planned is also mentioned. Finally, there is a sneak peek of workers coating the Iron Lady with chocolate-coloured paint, the first paint she wore before changing colour several times. As a plot device, Eiffel is seen sketching multiple projects for a tower in the shape of an A, in reference to Adrienne Bourgès, in his office in Levallois. He actually hardly ever drew at all; he didn't enjoy drawing and left it to the army of draughtsmen employed at his company. In any case, as one of the main shareholders of Gaumont in its early days, he would surely have been delighted to see himself portrayed as a film hero!

# THE PHOTOGRAPHER'S EIFFEL TOWER

By BERNARD PERRINE, correspondent of the Académie des Beaux-Arts (photography section)







hronophotography had just taken its first steps, and there was no talk of "time-lapse", a technique that is now commonly used to follow the progress of construction sites. The work of Théophile Féau (1839-1892) could nevertheless be seen as a precursor to the first representation of this technique. As soon as the building site opened, this amateur photographer came up with a way to regularly record progress in the construction of a Tower that was heavily disparaged at the time. To this end, every month from 10 August 1887 to 2 April 1889, he set up his camera on one of the towers of the former Palais du Trocadéro, which no longer exists. His precious archival work consisted of 19 shots. Most of them are now gathered in albums containing several plates, often mounted in accordion form so that they can be unfolded. The postcard showing the different stages of the construction of the Eiffel Tower between 1887 and 1889 is a best-seller, along with Robert Doisneau's "Baiser de l'hôtel de ville" (1950).

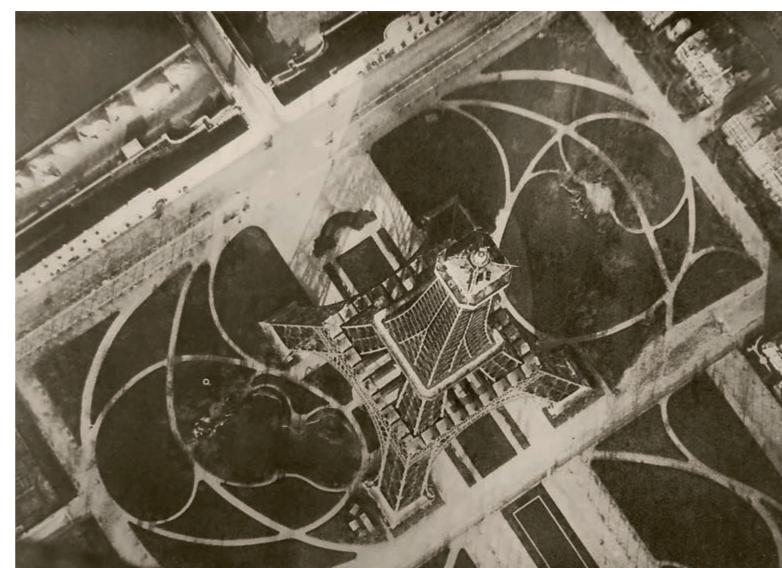
While history has retained the images of Théophile Féau for their originality, many other photographs intended to document the building site were taken by photographers specialized in architectural views. Among them were Louis-Émile Durandelle, probably commissioned by Gustave Eiffel and of whom about a hundred prints are in the Musée d'Orsay's collection, and the Neurdein brothers.

Photography was thus able to magnify the realization of a project that would itself become the most photographed object in the world. "A spectacle looked at and looking, a useless and

irreplaceable building, a familiar world and heroic symbol, the witness to a century and an always new monument, an inimitable and endlessly reproduced object, it is the pure sign, open to all times, all images and all senses: the unbridled metaphor". This text by Roland Barthes, testimony to a time that insisted on the ascendancy of letters over signs, took up almost the entire cover of *The Eiffel Tower*<sup>1</sup>, the first edition of which went so far as to exclude mention of the photographs documenting it.

While it is anything but seminal, this text nonetheless encompasses all the contradictions that the Tower generated. While photography reveals the history of the Tower, photographs of it bear witness to the history of photography and the evolution of photographic practices.

From the outset, Gabriel Loppé<sup>2</sup>, one of the first photographers to take an interest in Paris by night, settled on the new tower as one of his favourite subjects. From his balcony, he documented it being struck by lightning on several occasions. Others would record bad weather assailing it, as well as the horrors of war and deliverance from war. Others still, long before Yann Arthus-Bertrand, after the experiments of Félix Tournachon, known as Nadar – who also took Gustave Eiffel's portrait – went to observe it from above. With, as a result, Schelcher and Omer-Décugis' Tower seen from a balloon<sup>3</sup>, the first ever aerial photograph, published as a double-page spread in L'Illustration on 5 June 1909. And very soon, as early as 1906, pioneers such as Léon Gimpel would give it freshly invented autochrome colour, before recording it being lit up with Citroën advertisements in 1925. To









- 1 The Eiffel Tower: and other mythologies, text by Roland Barthes, Photographs by André Martin, University of California Press, 1997 (1964).
- 2 Gabriel Loppé, painter and photographer (1825-1913), *The Eiffel Tower struck by lightning*, photograph taken from the balcony of his flat. It bears the words: "Paris, 14 avenue du Trocadéro, 3 juin 1902, 9 heures 20 du soir» (Paris, 14 avenue du Trocadero, 3 June 1902, 9.20 p.m.).
- 3 A. Schelcher, A. Omer-Décugis, Paris vu en ballon et ses environs, Paris, Hachette et Cie, 1909.

Above right, views of the evolution of the Tower's construction as photographed by Théophile Féau, from 1887 to 1889, from one of the towers of the former Palais du Trocadéro.

Top right: The Tower seen from a hot air balloon, by Schelcher and Omer-Décugis, the first aerial photograph published in the newspaper L'Illustration (1909). This photo inspired the painter Robert Delaunay for his work Eiffel Tower and garden, Champs-de-Mars (1922).

keep to a few significant representations that accompanied the evolution and history of photography, we will skip hundreds of thousands of photographs that are little more than commercial exploitations of the Tower, too often vulgar and saturated with colours or coloured artifices.

Significantly, only movements that participated in modernity would magnify the Tower for its own sake in a praise of "Metal", as seen in Germaine Krull's eponymous work<sup>4</sup>, Henri Lacheroy's 1933 bust of Gustave Eiffel at the foot of the Tower's metal lacework, or François Kollar's low-angle shots, superpositions and montages (1931). And the architectures that Lucien Hervé compiled in a volume.

After the poetic beauty of steel came the time of poets of light and shadow, sometimes accompanied by texts such as those, among others, by Blaise Cendrars for Izis Bidermanas' *Paris of dreams*, by Aldous Huxley for Sanford H. Roth's *Mon Paris*<sup>5</sup>, by Jean Roy for André Martin's *Tout Paris*<sup>6</sup>, or by Cavanna for Louis Stettner's *Sous le ciel de Paris*<sup>7</sup>.

In 1929, it was André Kertesz who, by day, played with the Shadows of the Eiffel Tower, while Brassaï enchanted its lights in his Paris by Night<sup>8</sup>. Later, in the 1950s, the Tower accompanied Willy Ronis' Les amoureux de la Bastille. In 1953, a young Marc Riboud would gain experience on the Eiffel Tower by photographing Zazou the painter, cigarette between his lips, hat set back on his head like Buster Keaton. He wanted his Painter of the Eiffel Tower to take this pose "to match the metal structure of the Tower". This photograph marked the photographer's first publication in Life and his entry into the Magnum agency, and would go on to become iconic. Just as Lewis Hine's photographs of the Empire State Building paid homage to the workers who regularly tend it.

In 1989, to celebrate its centenary, the photographer Elliott Erwitt offered the *Iron Lady* a sort of ode to rain, which soon became another icon. Conversely, other photographers have used the Tower as a backdrop to promote clothing and fashion accessories. In 1939, Erwin Blumenfeld photographed Lisa Fonssagrives swinging on the heights of the Tower, Balenciaga dresses blowing in the wind, and Véra Boréa intertwining Erik hats with its metallic lace. In 1949, it was Norman Parkinson's turn with Dovina and her hats, before Frank Horvat pictured the building shrunken between two shoes in 1974.

Finally, Robert Doisneau and JR played tricks on it, the former in 1965 by distorting it, the latter last spring by embedding it in a trompe-l'oeil that made it look like it was overarching a canyon.



Over time, the architectural feat has become a myth, an emblematic symbol of Paris and of France. Technological breakthroughs and the evolution of equipment have simplified photography and the way we photograph. Why and how can the most photographed symbol in the world be photographed? Sociologists have not been the only ones to study the subject. With the carte blanche given to him by the MEP<sup>9</sup>, Martin Parr spent two years taking an ironically original look at Paris and its symbols. The Tower seems to "glitter" with the mass tourism gathered at its feet, smartphones brandished at arm's length or posing to appear to be holding its point, while street vendors harass them to sell their thousands of ersatz of the myth.

- 4 *Métal*, photographs by Germaine Krull (1897-1985), Paris, Librairie des Arts Décoratifs, A. Calavas Éditeur (1928). Portfolio including a title page, a preface by Florent Fels and sixty-four heliogravures in sheets.
- 5 Mon Paris, photographs by Sanford H. Roth, text by Aldous Huxley. Editions du Chêne 1953.
- 6 *Tout Paris*, photographs by André Martin, text by Claude Roy, Delpire éditeur 1964.
- 7 Sous le ciel de Paris, photographs by Louis Stettner presented by Cavanna, Parigramme 1997.
- 8 *Paris de nuit,* photographs by Brassaï, text by Paul Morand. Published by Art et Métiers Graphiques, collection «Réalités», 1933.
- 9 After Ralph Gibson, Mimmo Jodice and Bruce Davidson, Jean-Luc Monterosso, director of the MEP (Maison Européenne de la Photographie), gave Martin Parr a free pass to deliver his vision of Paris. He produced 60 colourful images, which were exhibited at the MFP in 2014.

Above: Marc Riboud's (1923-2016) famous 1953 photo of the posing Painter of the Eiffel Tower.

## Tribute



Guy de Rougemont died on 18 August 2021 in Montpellier. He was elected in 1997 to the Académie des Beaux-Arts' Painting section, in the seat previously held by Jean Bertholle. Photo credit: Michel Jacquelin

uy du Temple de Rougemont, born in 1935 in Paris into a military family, was a painter, sculptor, lithographer, and an advocate for a decompartmentalization of the arts: "One does not pass with impunity from plane to volume, from the object to the monument, without one day all of this merging into one and the same practice", he claimed, without ever disavowing his true vocation: "I am a painter: my sculpture, my furniture, my carpets are made by a painter".

A student at the École Nationale des Arts Décoratifs in Marcel Gromaire's studio, he resided at the Casa de Velasquez from 1962 to 1964. It was on his return from a year spent in New York that he oriented his pictorial research towards space, with a dream of experiencing colour in everyday life, for free, playful creation. He inaugurated his first sculptures at the 1965 Paris Biennale and used standardized materials, lacquered aluminium and Plexiglas. By renewing poster art in 1968, he experimented with the simplest means for living street art.

The over-riding feature of his repertoire of forms is a *linea* serpentinata with a play on its chromatic and formal qualities, be it flat or in volume, which does away with the boundary between painting and sculpture while taking over public places. Classical rigour is combined with a sensual baroque. Rougemont has made a major contribution to the transformation of the urban landscape and has collaborated with architects under the 1% project. He created the colour scheme for the Musée d'Art Moderne de la Ville de Paris in 1974, the mosaic forecourt of the Musée d'Orsay in 1986, the Marne-la-Vallée RER station, the sculptures on the A4 motorway near Châlons-en-Champagne, and the Saint-Louis hospital. Be it in Bonn, Quito, Taiwan, the Principality of Andorra, Villeurbanne, or Nanterre, his cut-outs in bold colours have made him a geometer of colour.



The Académie des Beaux-Arts, through its Permanent Secretary Laurent Petitgirard, has welcomed the awarding of the Praemium Imperiale, considered to be the "Nobel Prize of Art", to Sebastião Salgado, a member of the Académie's Photography Section.

The announcement of the winners of the 32nd edition took place on 14 September 2021 at the Institut de France. The other winners were James Turrel (Sculpture), Yo-Yo Ma (Music), and Glenn Murcutt (Architecture), and the young artists of the Scuola di Alta Formazione dell'Istituto Centrale received the Encouragement Prize.

Sebastião Salgado, born in 1944 in Aimorés, Minas Gerais, Brazil, began his career as a professional photographer in 1973 in Paris. He successively joined the Sygma, Gamma, and Magnum agencies until he and his wife Lélia Wanick Salgado founded Amazonas images, an agency exclusively dedicated to his work, in 1994. He has travelled to over 100 countries for his photographic work and especially for his long-term projects which, in addition to numerous publications in the international press, have been presented in books such as Other Americas (1986), Sahel: The End of the Road (1986), The Hand of Man (1993), Terra (1997), Exodus and Children of the Exodus (2000), Africa (2007), Genesis (2013), The Scent of a Dream (2015), Kuwait, a Desert on Fire (2016) and Gold (2019).

Sebastião and Lélia have been working since the 1990s on the environmental recovery of part of the Atlantic Forest in Brazil, in the state of Minas Gerais, and have created the Instituto Terra, whose mission is reforestation and environmental education. A great witness to the human condition and the state of the planet, Sebastião Salgado sees photography as "a powerful language to try to establish a better relationship between man and nature".

He was elected to the Académie des Beaux-Arts on 13 April 2016 in the seat previously held by Lucien Clergue. ■

Photo credit: Yann Arthus-Bertrand

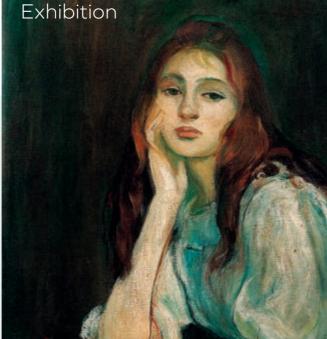


On 3 November 2021, the Académie des Beaux-Arts held its weekly plenary session outside the Palais de l'Institut de France. Photo credit: Florent Gardin / City of Arles

This session concluded a two-day visit by the members and correspondents in Arles, where they visited the École Nationale Supérieure de la Photographie d'Arles, designed by the architect Marc Barani (member of the Architecture section of the Académie), the Luma Foundation, the Réattu Museum, and the studio of photographer and late member of the Académie, Lucien Cleraue.

After the Villa Méditerranée in Marseille in 2018, the École Nationale d'Architecture de Versailles, and the Collection Lambert in Avignon in 2019, for the fourth time since its creation in 1816, the Académie des Beaux-Arts held its weekly plenary session on Wednesday 3 November publicly, in a "decentralized" location, the Salle d'Honneur of the Hôtel de Ville of Arles, at the invitation of its mayor, Patrick de Carolis, himself a member of the Académie des Beaux-Arts.

An advisory body to the public authorities, composed of 63 members, 16 foreign associate members and 63 correspondents, in addition to its missions as a support for artistic creation and a defender of France's artistic heritage, the Académie is always reflecting on artistic issues in its weekly meetings, during which it often invites personalities from the cultural and political world to speak.



Elections





Musée Marmottan Monet | ongoing

# "Julie Manet, the Impressionist memory"

Until 20 March 2022, the Musée Marmottan Monet, owned by the Académie des Beaux-Arts, is presenting "Julie Manet, the Impressionist memory", the first exhibition ever devoted to Édouard Manet's niece and Berthe Morisot's only daughter, Julie Manet.

s the legatee of Julie Manet through her children, and custodian of the world's largest collection of Berthe Morisot's work and of the family's collections, the Musée Marmottan Monet, which is owned by the Académie des Beaux-Arts, wishes to shed light on the role of Julie Manet in the life of the arts. This event highlights three aspects of her life. The first section evokes her childhood and adolescence and presents her family and friends. The next section highlights the art collection that Julie Manet and her husband Ernest Rouart have built up. In addition to the pieces inherited from Berthe Morisot, the works acquired by the couple will be presented: Hubert Robert, Corot, Degas and large panels of Monet's Water Lilies - acquired before Michel Monet's death in 1966. The last section is dedicated to the numerous gifts, bequests and donations made by Julie Manet and her family to French museums, and more generally to the family's efforts to promote the works of Berthe Morisot and Édouard Manet.

marmottan.fr | until 20 March 2022

Above: Berthe Morisot, *Julie rêveuse*, 1894, oil on canvas, 65 x 54 cm. Private collection © Rights reserved

During its plenary session on Wednesday 15 September 2021, the Académie des Beaux-Arts elected William Kentridge as a Foreign Associate member to seat 13, previously held by Ilias Lalaounis (1920-2013). Photo credit: Norbert Miguletz

Born in Johannesburg in 1955, William Kentridge is a major artist on the contemporary art scene. His love of art led him to join the Johannesburg Art Foundation, and in the early 1980s he studied theatre and pantomime at the École Jacques Lecog in Paris. He then returned to South Africa and became an actor and director with the Junction Avenue Theatre Company in Johannesburg. At the same time, he worked on TV films and series as an artistic director. William Kentridge combines many artistic practices in his work: drawing, engraving, sculpture, tapestry, animated film, performance, video installation, projections of his own drawings and the use of giant puppets. As a polymorphous artist, his favourite medium remains charcoal, and drawing has remained the main theme throughout his career. Through his art, he reflects on history and the human condition, including both an intimate and a political and social dimension. He denounces the apartheid, racism, and colonialism, and offers a vision of the subjects he tackles that is both poetic and critical.

On Wednesday 24 November 2021, the Académie des Beaux-Arts elected Ernest Pignon-Ernest to Seat 7 of the Painting section, previously held by Vladimir Veličković (1935-2019). Photo credit: Ernest Pignon-Ernest

rnest Pignon-Ernest, a draughtsman and visual artist born in Nice in 1942, has been working in the public space since the 1960s. The works of this artist, considered one of the pioneers of urban art, are made with charcoal, black stone and notched erasers. His serigraphed human representations are pasted on the walls of cities around the world. In 1971, he took the steps of the Sacré-Coeur as his canvas, where he depicted figures lying side by side in reference to the events of the Commune. In 1974, to denounce apartheid and Nice's decision to engage in a partnership with Cape Town, he pasted images of a Black family behind fences on the city's walls. In 1978, as a tribute to Arthur Rimbaud, he posted 400 life-size images of the writer in Paris and Charleville-Mézières. Between 1988 and 1995, he posted drawings and quotations from Caravaggio in the streets of Naples, a city he would return to in 2014. In 2002, in Soweto, South Africa, he pasted images of women carrying their children who had died of AIDS. Ernest Pignon-Ernest is strongly influenced by the painters of the Italian Renaissance. His art denounces the tragedies of our time and raises awareness. His works are exhibited in many French and foreign museums.

During the plenary session of 15 September 2021, the Académie des Beaux-Arts elected Patrick Poirier as a correspondent to the Sculpture section. Anne Poirier, who has been working with Patrick Poirier since their stay at the Villa Médicis, had been elected a member of the Sculpture section of the Académie des Beaux-Arts on 23 June 2021.

54



Robert Delaunay (1885-1941), Study for Air, iron, water, circa 1937, gouache on paper, 48.4 x 75.2 cm. Robert Delaunay, a figure of modernity, created this large mural to decorate the French railway pavilion at the 1937 Paris Universal Exhibition. It presents a synthesis of the major motifs and chromatic themes that ran through his work: circular shapes, a locomotive, the Eiffel Tower, the Sacré-Cœur. Private collection. Photo credit: Christie's



Retrouvez toute l'actualité de l'Académie des beaux-arts sur internet : www.academiedesbeauxarts.fr





Twitter

Instagram

This Lettre de l'Académie des beaux-arts and previous issues are available at: https://www. academiedesbeauxarts.fr/travaux-academiques, under the category "La Lettre de l'Académie".

Directeur de la publication : Laurent Petitgirard | Comité de rédaction : déléguée, Lydia Harambourg Membres: Gérard Garouste, Brigitte Terziev, Claude Abeille, Antoine Poncet, Aymeric Zublena, Pierre-Antoine Gatier, Bernard Desmoulin, Érik Desmazières, François-Bernard Mâche, Régis Campo, Thierry Escaich, François-Bernard Michel, Muriel Mayette-Holtz, Jean Gaumy, Blanca Li, Didier Bernheim, Claude-Jean Darmon, Bernard Perrine, Jean-Luc Monterosso, Robert Werner | Conception générale, rédaction et coordination : Nadine Eghels | Traduction : Liz Carey-Libbrecht | Conception graphique, réalisation : Claude-Matthieu Pezon | Impression : Imprimerie Chauveau Indica • ISSN 1265-3810

L'Académie des beaux-arts est l'une des cinq académies qui constituent l'Institut de France avec l'Académie française, l'Académie des Inscriptions et belles-lettres, l'Académie des sciences et l'Académie des sciences morales et politiques. www.institut-de-france.fr

**Académie des beaux-arts** | 23, quai de Conti 75006 Paris | +33 1 44 41 43 20

## L'ACADÉMIE DES **BEAUX-ARTS**

Secrétaire perpétuel : Laurent Petitgirard Présidente : Astrid de la Forest Vice-président : Michaël Levinas

Pierre Carron • 1990 Yves Millecamps • 2001 Philippe Garel • 2015 Jean-Marc Bustamante • 2017 Gérard Garouste • 2017 Fabrice Hyber • 2018 Catherine Meurisse • 2020 Ernest Pignon-Ernest • 2021

Claude Abeille • 1992 Antoine Poncet • 1993 Brigitte Terziev • 2007 Pierre-Édouard • 2008 Jean Anguera • 2013 Jean-Michel Othoniel • 2018 Anne Poirier • 2021

Jacques Rougerie • 2008 Aymeric Zublena • 2008 Alain Charles Perrot • 2013 Dominique Perrault • 2015 Jean-Michel Wilmotte • 2015 Marc Barani • 2018 Bernard Desmoulin • 2018 Pierre-Antoine Gatier • 2019 Anne Démians • 2021

Érik Desmazières • 2008 Astrid de la Forest • 2016 Pierre Collin • 2018

Laurent Petitgirard • 2000 François-Bernard Mâche • 2002 Édith Canat de Chizy • 2005 Michaël Levinas • 2009 Gilbert Amy • 2013 Thierry Escaich • 2013 Bruno Mantovani • 2017 Régis Campo • 2017

Michel David-Weill • 1982 Henri Loyrette • 1997 François-Bernard Michel • 2000 Hugues R. Gall • 2002 Marc Ladreit de Lacharrière • 2005 William Christie • 2008 Patrick de Carolis • 2010 Muriel Mayette-Holtz • 2017 Adrien Goetz • 2017

Roman Polanski • 1998 Régis Wargnier • 2007 Jean-Jacques Annaud • 2007 Jacques Perrin • 2017 Coline Serreau • 2018 Frédéric Mitterrand • 2019

Yann Arthus-Bertrand • 2006 Jean Gaumy • 2016 Sebastião Salgado • 2016 Dominique Issermann • 2021

Blanca Li • 2019 Angelin Preljocaj • 2019 Carolyn Carlson • 2020

S.M.I. Farah Pahlavi • 1974 Leonard Gianadda • 2001 Seiji Ozawa • 2001 Woody Allen • 2004 SA Karim Ága Khan IV • 2007 SA Sheikha Mozah • 2007 Sir Norman Foster • 2007 Antonio López Garcia • 2012 Philippe de Montebello • 2012 Jiří Kylián • 2018 Georg Baselitz • 2019 William Kentridge • 2021