

# Francis Picabia: Materials and Techniques

Edited by Michael Duffy, Talia Kwartler, Natalie Dupêcher,  
and Anne Umland

MOMA



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## Introduction and Acknowledgements

*Francis Picabia: Materials and Techniques* features 12 richly illustrated essays by an international group of conservators and curators. This online resource builds upon the unique opportunity for material and technical study occasioned by the exhibition *Francis Picabia: Our Heads Are Round so Our Thoughts Can Change Direction*, organized by The Museum of Modern Art and the Kunsthaus Zürich, and presented in New York from November 21, 2016, through March 19, 2017. The exhibition brought together over 200 works, including paintings, works on paper, printed matter, illustrated letters, sound recordings, and one film, and provided an overview of Picabia's unruly genius as manifested over the course of a 50-plus-year career.

Picabia, a self-proclaimed "Funny Guy" and "artist of many genres," was born in Paris in 1879 and died in that same city in 1953, having traveled and lived in many other places in between. Today he is best known as an irreverent Dadaist who, like no other artist before him, created a body of work that defies consistency and categorization, ranging as it does from Impressionist landscapes to abstraction, from paintings of machines to photo-based nudes, and from performance and film to poetry and publishing. Picabia's radical, experimental approach to materials and techniques is equally wide-ranging, yet it remains one of the most underexplored aspects of his oeuvre. This publication is the first to highlight Picabia's innovative artistic processes across his entire career; its overarching goal is to share new scholarship and spark future research and interpretation by students, specialists, artists, conservators, and amateurs alike.

Each of the 12 essays in this volume focuses on an individual work or pair of works that was included in the 2016–17 Picabia exhibition, with the exception of *La Feuille de vigne (The Fig Leaf)*, which was deemed too fragile to travel. As a group, the featured objects span the years 1912 to 1950 and represent a range of materials, mediums, and techniques. There is a particular emphasis on Picabia's practice as a painter, which remained a constant throughout the many otherwise diverse phases of his career. Each essay is complemented by a wealth of technical illustrations, including X-rays and ultraviolet, infrared, and raking light images. This type of scientific imagery, in concert with the essays and extended captions, offers new insight into the extraordinary surface variation and recurrent subsurface activity in Picabia's paintings. A selected bibliography is included for readers who wish to delve deeper into the technical and historical literature on the artist.

This publication was made possible by the support of an international group of conservators, scientists, curators, academics, and independent scholars. In addition to the authors who contributed essays, we would like to thank the following individuals: Stephanie D'Alessandro, The Gary C. and Frances Comer Curator of Modern Art, and Maria Kokkori, Conservation Research Fellow, The Art Institute of Chicago; Katy Rothkopf, Senior Curator, The Baltimore Museum of Art; Véronique Sorano-Stedman, Chief Conservator, Centre Pompidou, Musée national d'art moderne – Centre de creation industrielle, Paris; Isabelle Pallot-Frossard, Director, Centre de recherche et de restauration des musées de France (C2RMF); Beverley Calté, William A. Camfield, and Candace Clements, Comité Picabia; Christian Scheidemann, Founder and Senior Conservator, Contemporary Conservation; Joris Dik, Professor, Delft University of Technology; Jaap Boon, Founder and Conservator, JAAP Enterprise for Art Scientific Studies; Cathérine Hug, Curator, and Esther Braun, Exhibitions Organizer, Kunsthaus Zürich; Jean-Jacques and Hopi Lebel; Choghakate Kazarian, Curator, Musée d'Art moderne de la Ville de Paris; Sandra Kisters, Head of Collections and Research, Museum Boijmans Van Beuningen; Suzanne Penn, former Paintings Conservator, Philadelphia Museum of Art; Carol Stringari, Deputy Director and Chief Conservator, Gillian McMillan, Associate Chief Conservator for the Collection, and Federica Pozzi, former Conservation Scientist, Solomon R. Guggenheim Museum; Alain Tarica; Matthew Gale, Curator of Modern Art, Tate; and Ian McLure, the Susan Morse Hilles Chief Conservator, and Anne Turner Gunnison, Associate Conservator of Objects, Yale University Art Gallery.

At The Museum of Modern Art, we benefited from the invaluable assistance of colleagues in many departments. In The David Booth Conservation Center and Department, Jim Coddington, former Agnes Gund Chief Conservator, Kate Lewis, Agnes Gund Chief Conservator, Karl Buchberg, former Senior Paper Conservator, Anny Aviram, Conservator, Ana Martins, Conservation Scientist, Chris McGlinchey, Conservation Scientist, and Ellen Davis, Conservation Fellow, were our trustworthy collaborators as we researched the works in the Museum's collection and developed this project. In the Department of Digital Media, the essential support of Shannon Darrough, Director, Chiara Bernasconi, Assistant Director, and Jacqueline Thomas, Department Manager, made this publication feasible. In the Department of Marketing and Communications, we thank Jason Persse, Editorial Manager, the steadfast editor of our project.

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fig. 1. *La Source (The Spring)*. 1912. Oil on canvas, 8' 2¼" × 8' 2½"  
(249.6 × 249.3 cm). The Museum of Modern Art, New York. Eugene and  
Agnes E. Meyer Collection, given by their family, 1974

In 1912, Francis Picabia completed his two most ambitious abstract paintings to date: *La Source* (*The Spring*) and *Danses à la source* [II] (*Dances at the Spring* [II]) (figs. 1, 2).<sup>1</sup> He worked on these two monumental, eight-foot-square paintings in a spacious studio in his family's country home in Saint Cloud, outside Paris. The assured paint handling and large format of these works highlight Picabia's prowess as an abstract painter. Both canvases were shown at the Salon d'Automne in the fall of 1912. At the same time, across town, another thirteen recent abstractions by Picabia were exhibited at the Salon de la Section d'Or, an important early exhibition of Cubism held at the Galerie de la Boétie. Similar to other Picabia works of 1912, including *Tarentelle* (fig. 3), *La Source* has a limited palette of earth pigments and grays. The painting's nearly monochromatic palette and oversize square format emphasize its monumentality. Moreover, the palette is comparable in tone to works by Pablo Picasso and Marcel Duchamp from this period and earlier (figs. 4, 5).

Recent close study and conservation imaging provided new insights into Picabia's working methods. Using large rolls of canvas attached to stretchers with tacks, Picabia began by outlining the composition in dark blue-black dilute paint brushed onto the white-primed canvas. When *La Source* entered MoMA's collection in the 1970s, it was treated by conservators who used reflected infrared imaging to document an underlying composition—visible through the verso of the painting—of three standing female figures (fig. 6), evidence that Picabia first conceived *La Source* as a variation on the classical theme of the three graces. The underlying figures are also revealed in an X-ray image (fig. 7). Picabia ultimately obscured his female subjects by strategically adding passages of thickly impastoed paint. This transformed *La Source* into a purely abstract composition, even though traces of the underlying figures are still apparent under raking light (fig. 8). *La Source* is the earliest documented painting in which Picabia chose to alter his composition through overpainting, albeit in a gradual and methodical process. Later in his career, Picabia would radically revise paintings by partially or wholly repainting them, often using commercially available enamel paints.<sup>2</sup>

Picabia's characteristically energetic brushwork is much in evidence in *La Source*. He used stiff bristle brushes to apply the rich oil paint in a zigzagging pattern within the individual forms. The paint was deftly blended directly on the canvas in passages, and sometimes mixed with additional oil-resin medium for enhanced gloss. *La Source* was first exhibited at the Salon

d'Automne in 1912, in a gallery that also included a large abstract painting by František Kupka and figurative sculptures by Amedeo Modigliani (fig. 9). *La Source*'s thick impasto, combined with its muted palette of reddish browns and grays, prompted the critic Jean Claude to derisively compare the imposing painting's surface to "encrusted linoleum."<sup>3</sup>

Picabia apparently sent *La Source* and *Danses à la Source* [II] to New York with Marius de Zayas around 1914 for exhibition.<sup>4</sup> Soon afterward, the works mysteriously disappeared from view, only reemerging in 1974 in an astonishing rediscovery in the former home of Eugene and Agnes E. Meyer, in Mount Kisco, New York.<sup>5</sup> The paintings were found with two other abstractions by Picabia: *Mariage comique* (*Comic Wedlock*) and *C'est de moi qu'il s'agit* (*This Has to Do with Me*).<sup>6</sup> The Meyer family donated the works to MoMA that year. Because the four large paintings had been rolled up for decades, they required extensive conservation treatment before they could be displayed. They were carefully unrolled, flattened, mounted onto canvas using a beeswax-based adhesive, and then attached to aluminum panels, allowing the works to be shown at MoMA to great acclaim in 1980.<sup>7</sup>

Forty years later, a recent conservation treatment, undertaken in preparation for MoMA and the Kunsthaus Zürich's Picabia retrospective, removed layers of discolored, waxy residue and synthetic resin that had been applied to the surface of *La Source* in the 1970s. Removal of these restoration coatings has allowed for a renewed appreciation of Picabia's nuanced painted surface, revealing his impasto brushwork and lively palette, along with the variety of matte and gloss paint that frequently occurs within Cubist paintings that remain unvarnished.

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1. For further reading see the author's "Francis Picabia's Early Abstractions, 1912–14" (Paper presented at the symposium Picasso, Picabia, Ernst, Tate Britain, November 25, 2016). The essay will be published in the forthcoming volume *Picasso, Picabia, Ernst: New Perspectives*, ed. Annette King, Joyce H. Townsend, and Adele Wright (London: Archetype Publishing, 2017).
  2. For further reading on overpainting, see the essays on *La Feuille de vigne*, 29–36, and *Les Amoureux (Après la pluie)*, 43–46, in the present volume.
  3. Jean Claude, "La Vie artistique. Le Salon d'Automne," *Le Petit Parisien* (September 30, 1912), 2; quoted in William A. Camfield, *Francis Picabia: His Art, Life, and Times* (Princeton: Princeton University Press, 1979), 33. Camfield discusses Claude's article further: "Picabia had set 'the year's record for fantasy' with 'ugly' works that 'evoke encrusted linoleum.'" This information was relayed to the author in an email from Rachel Silveri (April 15, 2015).
  4. William A. Camfield, et al., *Francis Picabia: Catalogue Raisonné, Vol. I, 1898–1914* (Brussels: Mercatorfonds, 2014), 33, 341, 343.
  5. Press release for "Four Recently Discovered Picabias and Other Modern Master Acquisitions" (January 1980). Further information about the exhibition is available on MoMA's website: <https://www.moma.org/calendar/exhibitions/2285>.
  6. For further information on these paintings, see Camfield, et al., 378, 381–383. Color images of these works can also be found on Francis Picabia's artist page on MoMA's website: <https://www.moma.org/artists/4607>.
  7. Jean Volkmer, Unpublished treatment reports on Francis Picabia's *La Source* (1912), *Danses à la source [II]* (1912), *Mariage comique* (1914), and *C'est de moi qu'il s'agit* (1914), Department of Conservation, The Museum of Modern Art, New York (1978). These reports detail the history and treatment of the four works that were given to MoMA by the Meyer family in 1974. For further reading, see Grace Glueck, "Four Picabias Lost and Found," *The New York Times* (January 5, 1980), section C, 18; and Hilton Kramer, "Rediscovering a Quintessential Dadaist," *The New York Times* (February 3, 1980), section D, 25–27.

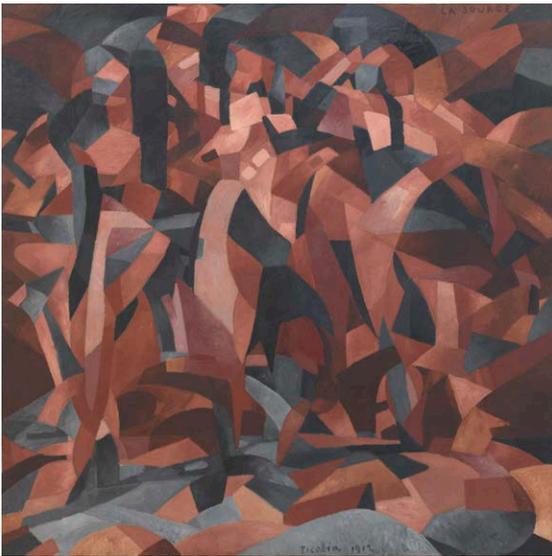


fig. 1



fig. 2

fig. 1. *La Source (The Spring)*. 1912. Oil on canvas, 8' 2¼" × 8' 2¼" (249.6 × 249.3 cm). The Museum of Modern Art, New York. Eugene and Agnes E. Meyer Collection, given by their family, 1974. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo: John Wronn and Jonathan Muzikar, The Museum of Modern Art

fig. 2. *Danses à la source [II] (Dances at the Spring [II])*. 1912. Oil on canvas, 8' 3½" × 8' 2" (251.8 × 248.9 cm). The Museum of Modern Art, New York. Eugene and Agnes E. Meyer Collection, given by their family, 1974. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo: Jonathan Muzikar, The Museum of Modern Art

fig. 3. *Tarentelle*. 1912. Oil on canvas, 29 × 36¼" (73.6 × 92.1 cm). The Museum of Modern Art, New York. Mary Sisler Bequest, 1990. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo: John Wronn, The Museum of Modern Art



fig. 3



fig. 4



fig. 5

fig. 4. Pablo Picasso. *Dryad*. 1908. Oil on canvas, 72⅞ × 42½" (185 × 108 cm). The State Hermitage Museum, St. Petersburg. © 2017 Estate of Pablo Picasso/Artists Rights Society (ARS), New York. Photo courtesy Scala/Art Resource, NY

fig. 5. Marcel Duchamp. *Le Roi et la reine entourés de nus vites (The King and Queen Surrounded by Swift Nudes)*. May 1912. 45½ × 59⅞" (114.5 × 128.5 cm). The Louise and Walter Arensberg Collection. Philadelphia Museum of Art, 1950. © 2017 Succession Marcel Duchamp/ADAGP, Paris/Artists Rights Society (ARS), New York. Photo courtesy Philadelphia Museum of Art



fig. 6



fig. 7



fig. 8



fig. 9

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**fig. 6.** *La Source*. During the 1970s treatment of this painting, conservators infused the canvas with wax to stabilize the painting during treatment. This infusion caused the underpainting of the work to become visible on the verso of the canvas, at which point it was documented with infrared photography. The image has been digitized and manipulated to correspond to the composition as seen from the front. Photo: Department of Conservation, The Museum of Modern Art, 1978/2015

**fig. 7.** *La Source*. X-ray image in which the three figures forming the underlying composition can be clearly identified. Photo: Department of Conservation, The Museum of Modern Art, 2015

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**fig. 8.** *La Source* (detail). At the left edge of the painting, below center, the curved hand of an underlying figure can be discerned under raking light. Photo: Department of Conservation, The Museum of Modern Art, 2016

**fig. 9.** *La Source* at the Salon d'Automne exhibition, Grand Palais des Champs Elysées, Paris, October 1912. Photograph reproduced in *L'illustration* (Paris, October 1912). Photo courtesy *L'illustration*



fig. 1. *Edtaonisl (ecclésiastique)* (*Edtaonisl [Ecclesiastic]*). 1913.  
Oil and metallic paint on canvas, 9' 10¼" × 9' 10¾" (300.4 × 300.7 cm).  
The Art Institute of Chicago. Gift of Mr. and Mrs. Armand Bartos, 1953

Francis Picabia began painting *Edtaonisl* (*ecclésiastique*) (*Edtaonisl [Ecclesiastic]*) (fig. 1) in 1913, after a visit to New York City to see the Armory Show. Upon his return to Paris, his wife, Gabrielle Buffet-Picabia, recalled, “He immediately began to work, ordered some canvases of three square meters and filled them with a feverous, unimaginable rapidity. He worked night and day, without eating.”<sup>1</sup> The composition was inspired by memories of the artist’s transatlantic voyage on the *Lorraine*, during which he encountered the famed dancer Stacia Napierkowska practicing on the ship’s deck, under the watchful eyes of a Dominican priest. The title *Edtaonisl*, painted in block letters in the upper right corner, is an invented word interspersing the letters of the French words *étoile[e]* (star) and *dans[e]* (dance), hinting at the subject matter.<sup>2</sup> Picabia worked simultaneously on another large canvas of the same dimensions, to which he also gave a mysterious title: *Udnie* (*Jeune fille américaine; danse*) (*Udnie [Young American Girl; Dance]*) (fig. 2).

Both paintings debuted at the 1913 Salon d’Automne, to mixed reviews, and then disappeared from view for several decades. An image from circa 1934–35 shows *Edtaonisl* hanging together with *Udnie* in the Château de Mai, Picabia’s house in Mougins (fig. 3). In 1947, Marcel Duchamp and André Breton discovered *Edtaonisl* rolled up in the corner of the artist’s studio. *Udnie* was discovered in the possession of a dealer. In a letter to Christine Boumeester, an artist friend, Picabia described the canvas as “our poor friend *Edtaonisl*, who is always so sad—terrible skin disease. It is not a new painting, but rather a new chaos which one must render clear, sharp and cruel, perhaps full of a subtle magic.”<sup>3</sup> Having been rolled and folded for years, the paint surface had developed an overall pattern of parallel horizontal cracks, as well as many small losses. Picabia and Boumeester restretched and restored the work, taking “great care to preserve the composition, color and texture,” recalled Boumeester.<sup>4</sup> After display at the Musée National d’Art Moderne in 1948 alongside *Udnie*, *Edtaonisl* was briefly in the collection of the artist Fritz Glarner, before making its way into the collection of the New York architect Armand Bartos, who donated it to The Art Institute of Chicago in 1953.

Since 1953, the monumental canvas has been on regular display at The Art Institute of Chicago (fig. 4). Over the years, the fragile paint surface has required a number of conservation interventions, including wax-lining, several consolidation campaigns (during which adhesive was fed into cracks and paint losses), and the application of multiple varnish layers. The

surface appearance was additionally compromised by patchy discoloration of the paint that Picabia and Boumeester had used to cover areas of damage during the 1947 restoration campaign. In 2014, a yearlong research and conservation treatment was undertaken to remove the non-original, deteriorated surface coatings and darkened retouchings, secure the cracking paint, and investigate the materials and techniques used to create the painting.

This research revealed that Picabia worked out the composition directly on the stretched canvas, without the use of preliminary drawings, outlining many of the forms with thin lines of dark paint before filling them in with a medium-rich oil paint (fig. 5). While working, Picabia made a few changes to forms in the upper right (fig. 6), where smaller shapes were simplified or incorporated into larger expanses of color. This suggests that he may have started work on the upper half of the composition first, working his way across the surface using a varied palette dominated by ochre and other earth pigments, in addition to blue, black, white, and gray. Picabia’s palette also included two pigments unusual for 1913: a vivid cobalt violet and a gold pigment found in select forms (fig. 7)—perhaps a nod to the subject matter of a bejeweled dancer, or an early attempt to incorporate an unexpected metallic element on a modern paint surface. The discovery of gold pigment was significant, since it is the earliest known example of Picabia’s use of metallic paint, which he later employed to a great extent in his Dada works. He took care to vary methods of paint application, using small and large brushes as well as palette knives to manipulate the paint in each form to create a lively, textured surface.<sup>5</sup> The resultant picture exhibits intentional variations in surface gloss due to the artist’s carefully modulated paint mixtures, including the addition of varnish to some colors, particularly evident in the blacks (fig. 8). The original paint surface has a depth and motion to it that evokes both a dancer’s movement and the tumultuous sensation of a ship’s deck on the rolling sea.

The most astonishing discovery resulting from the recent treatment of the work was the presence of a different, earlier title, now obscured: the word “*Extravagances*” painted in block letters at the upper right on a background of violet paint, which Picabia covered with black paint and the white letters of *Edtaonisl*. Seen clearly in the X-ray of the painting, *Extravagances* is an unexpected but fitting description for the monumental painting and for the artist—both dynamic and inscrutable, joyously and steadfastly pushing the boundaries of modern painting (fig. 9).

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1. Gabrielle Buffet-Picabia, *Aires Abstraites* (Geneva: Pierre Cailler, 1957), 32.

2. William Camfield, *Francis Picabia: His Art, Life, and Times* (Princeton: Princeton University Press, 1979), 61.

3. Francis Picabia to Christine Boumeester, n.d. [c. August 1947]; quoted in Camfield, 270.

4. *Ibid.*, 270n26.

5. Maria Kokkori, Celine Daher, and Francesca Casadio, Unpublished analytic report of pigment analysis for *Edtaonisl (écclésiastique)* (1913), Department of Conservation, The Art Institute of Chicago (2015).



fig. 1



fig. 3



fig. 2



fig. 4

fig. 1. *Edtaonisl (ecclesiastique)* (*Edtaonisl [Ecclesiastic]*). 1913. Oil and metallic paint on canvas, 9' 10<sup>1</sup>/<sub>4</sub>" × 9' 10<sup>3</sup>/<sub>4</sub>" (300.4 × 300.7 cm). The Art Institute of Chicago. Gift of Mr. and Mrs. Armand Bartos, 1953. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo courtesy The Art Institute of Chicago

fig. 2. *Udnie (Jeune fille américaine; danse)* (*Udnie [Young American Girl; Dance]*). 1913. Oil on canvas, 9' 6<sup>3</sup>/<sub>8</sub>" × 9' 10<sup>1</sup>/<sub>8</sub>" (290 × 300 cm). Centre Pompidou, Musée national d'art moderne – Centre de création industrielle, Paris. Purchased by the State, 1948. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo © Centre Pompidou, MNAM-CCI/Georges Meguerdtchian/Dist. RMN–Grand Palais/Art Resource, New York

fig. 3. Picabia with *Edtaonisl* and *Udnie*, installed at the Château de Mai, Mougins, c. 1934–35. Photograph possibly by Germaine Krull. Photo courtesy Archives Comité Picabia

fig. 4. Picabia's *Edtaonisl* on display at the top of The Art Institute of Chicago's Grand Stairs during the May Festival, 1960. Photo courtesy The Art Institute of Chicago



fig. 5



fig. 6



fig. 7



fig. 8

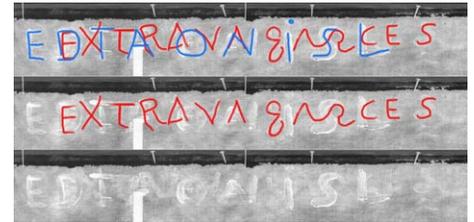


fig. 9

**fig. 5.** *Edtaonisl (ecclésiastique)*. Digital reflected infrared photograph, highlighting some of the painted outlines of the forms used to block in the composition before painting. There are no known sketches for *Edtaonisl*. Picabia appears to have worked out the composition freehand on the stretched canvas. Some minor adjustments to the composition are evident here, particularly in the forms in the upper right corner. Photo: Allison Langley, The Art Institute of Chicago, 2015

**fig. 6.** *Edtaonisl (ecclésiastique)*. Digital X-ray composite, revealing a few composition changes to the size and placement of shapes in the upper right corner of the painting, in addition to a number of small adjustments made to the edges of the forms overall as Picabia painted. Metal fittings in the (not original) stretcher are visible as light horizontal lines through the center and around the perimeter. Photo: Kelly Keegan, The Art Institute of Chicago, 2015

**fig. 7.** *Edtaonisl (ecclésiastique)* (detail). Picabia used a gold paint to create several shapes below the center of the composition, including these thinly painted triangular forms. The metallic paint contains actual gold pigment particles ground into the oil paint medium. The black outline of the underdrawing and the horizontal cracking of the paint are also visible. Photo: Allison Langley, The Art Institute of Chicago, 2015

**fig. 8.** *Edtaonisl (ecclésiastique)*. Digital ultraviolet visible-fluorescence photograph, showing the inherent varied fluorescence of the pigments. Additionally, the greenish tone visible in select areas suggests that Picabia added natural resin varnish to certain compositional forms to vary the surface sheen. The dark purple marks indicate retouching. Photo: Christopher Gallagher, The Art Institute of Chicago, 2014

**fig. 9.** *Edtaonisl (ecclésiastique)* (details). The most striking discovery in the X-ray is the presence of an earlier title below the letters that spell out *Edtaonisl*. These annotated X-rays highlight the earlier title for the painting, *Extravagances*, which lies below the block letters that spell out "EDTAONISL." Photo: Allison Langley, The Art Institute of Chicago, 2015

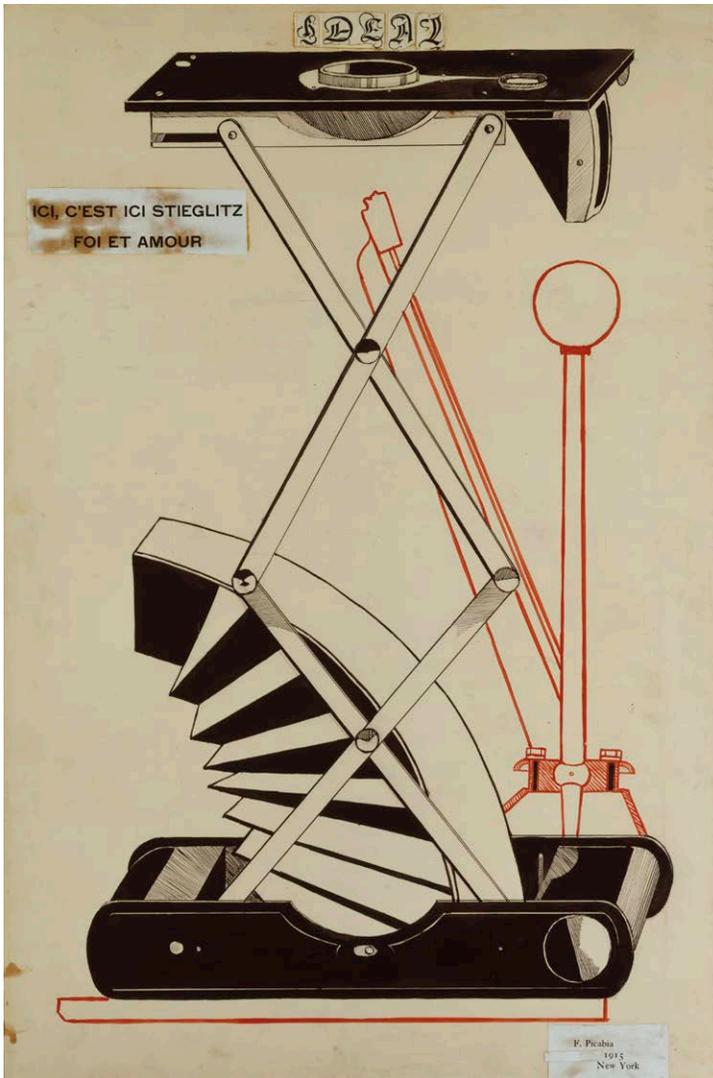


fig. 1. *Ici, c'est ici Stieglitz (Here, This Is Stieglitz Here)*. 1915. Ink, gouache, and cut-and-pasted printed papers on board, 29 7/8" × 20" (75.9 × 50.8 cm). The Metropolitan Museum of Art, New York. Alfred Stieglitz Collection, 1949

fig. 2a. *291*, nos. 5–6 (deluxe edition) (cover). Published July–August 1915, New York. Edited by Paul Haviland, Agnes Ernst Meyer, Alfred Stieglitz, and Marius de Zayas. Printed journal with illustrations by Francis Picabia. Letterpress, page (folded): 17 1/4 × 11 3/8" (43.8 × 28.9 cm). The Museum of Modern Art Library, New York

Among Francis Picabia's earliest mechanomorphic works are the machine portraits that he produced for publication in the American photographer and gallerist Alfred Stieglitz's journal *291*, nos. 5–6, a double issue known as the "Picabia number." Each machine portrait began as a handmade maquette (fig. 1) before being mechanically reproduced in the printed journal (figs. 2a, 2b). The artist is believed to have made maquettes for each of the five portraits reproduced in *291*, only two of which are extant: *Ici, c'est ici Stieglitz* (*Here, This Is Stieglitz Here*) and *Voilà Haviland* (*Here Is Haviland*) (fig. 3). The following text focuses on the handmade maquette, *Ici, c'est ici Stieglitz*, tracing the process by which this work became the printed cover of *291*, nos. 5–6. The image of the camera will be examined and the textual elements will be discussed, followed by an examination of the transfer process used to move from the maquette to the final printed work.

The maquette for *Ici, c'est ici Stieglitz* is composed of the black-and-white image of a camera bellows, supplemented by a red lever and three collaged areas of text. Picabia first drew the image of the camera and lever in pencil, reinforcing the lines in black ink and red gouache, and filling in the solid areas with ink. The pencil underdrawing at the base of the red lever is clearly visible with infrared examination (fig. 4). Visible in the central area above the camera's accordion-like bellows are faint, equally spaced pencil lines in an inverted pyramidal shape that might be remnants of an earlier version of the camera bellows. This original outline was more closely aligned with how an actual camera bellows looks and functions, as seen in an advertisement for "The Vest Pocket Kodak" (fig. 5). In its final, inked version, the camera bellows curves outward from the interior of the machine, rather than rising straight up to meet the camera lens, suggesting a state of partial collapse.

The maquette includes three cut-and-pasted areas of text: the word, "IDEAL" along the top center edge; the phrase, "ICI, C'EST ICI STIEGLITZ/FOI ET AMOUR" ("Here, This Is Stieglitz Here/Faith and Love") in the upper left quadrant; and the words "F. Picabia/1915/ New York" at the bottom right. To lay out the wording for the work's mechanically reproduced signature, date, and place of execution, along with the longer phrase that refers to Stieglitz, printed letterpress text on paper was adhered to the board support. These two snippets of text were most likely printed specifically for the maquette, on separate pieces of paper. Below Picabia's name, and to the left of the printed year, a thin, rectangular strip of blank paper was used to cover other printing (fig. 6). In the five printed portraits that

compose *291*, nos. 5–6, the block of text containing the artist's name is identical in all but two portraits: *Le Saint des saints* (*The Saint of Saints*) and *Portrait d'une jeune fille américaine dans l'état de nudité* (*Portrait of a Young American Girl in the State of Nudity*) (fig. 7). In these two prints, the date and/or month precede the year. The paper "correction" in the Stieglitz maquette covers the characters visible on the other two prints, and can be seen on the maquette with infrared examination (fig. 8).

The text at the top of the maquette, spelling out "IDEAL" in elaborate letters, differs from the other two areas of text in both the maquette and printed journal. The letters were cut out, either separately or as a pair (fig. 9). Infrared analysis reveals that these letters are printed double-sided, indicating a different origin than the other two collaged texts found in the maquette. Examination of the Gothic text of "IDEAL" under magnification indicates that all of the letters are letterpress printed except the "L," which is hand-drawn in ink. Perhaps there was no "L" available in whatever source the letters were taken from, and Picabia resorted to drawing the letter. The treatment of the letters also varies; for example, the "I," "D," and "E" were mounted onto a secondary support paper before being mounted to the board. It is possible that these letters were cut from an earlier version of the maquette or from another work.

When comparing the Stieglitz maquette to its printed counterpart in the "Picabia number" of *291*, it becomes apparent that the hand-drawn, imperfect qualities of the lines in the maquette are retained in the print (fig. 10). This indicates that the image was photographically transferred to a metal plate to be acid-etched and then printed in relief. For this process, a zinc plate was coated with light-sensitive gelatin, and a negative of the maquette was placed upon it for exposure. When exposed to light, the transparent lines of the image allowed the gelatin to harden on the plate, but the unexposed gelatin could be rinsed away in warm water. The bare areas of metal were then etched away in an acid bath. The block was made ready for printing by inking the high surfaces of the plate left in relief after etching.

When viewed together, the most striking difference between the maquette and the printed journal cover is their difference in size; the maquette is nearly twice as large as the print (fig. 11). The negative used in the photographic transfer to the metal plate could have been enlarged or reduced to any size, accommodating for the modification in size of the print. When measurements of the image and lettering on the

maquette are compared with those of the printed journal cover, there is nearly always a 50 percent reduction in size between the maquette and the print.

The text is the same font style in both maquette and print, except for the word “IDEAL,” which has a slightly less ornate Gothic font in the printed journal; its scale is also reduced more than the 50 percent reduction used for the other texts in the maquette (fig. 12). The title of the publication, “291,” is the only addition to the print that is not present in the maquette. The texts “291” and “IDEAL” could have been added during the photographic transfer or as individual typeset letterpress characters in the printing chase (a heavy steel frame used to hold type in a letterpress). Either of these methods would yield the same printed impression on the paper.

Even though it is mechanically produced, the printed cover of 291, nos. 5–6, is not without the touch of a human hand. At the base of the red lever, two black, printed vertical lines have been reinforced with hand-applied black ink (fig. 13), most likely because the red ink is printed over the black printing ink in those areas, which would have lessened its intensity. There were 100 copies in the deluxe print edition; this hand addition has been found on two of the three copies examined.<sup>1</sup> As hand additions are known to exist on reproductions by Picabia found in other issues of 291 (fig. 14), this is in keeping with Picabia’s practice. The artist continued this practice in his own journal, 391, the first four issues of which were produced with a deluxe edition of 10 copies with hand-tinted additions.<sup>2</sup> Picabia continued to exploit techniques of mechanical reproduction in artworks produced during his Dada years, often making unique objects specifically for presentation in printed journals, and sometimes heightening these mechanically reproduced works through handmade additions after the printing process was complete.

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Acknowledgements: The author is grateful for the assistance of Rachel Mustalish, Paper Conservator at The Metropolitan Museum of Art, for facilitating access to the maquette and printed journal and sharing her thoughts on the artworks, in addition to providing infrared examination and images. Laura Neufeld, Assistant Paper Conservator at The Museum of Modern Art, generously aided in the image preparation.

1. Two deluxe copies were examined, held in the libraries of The Museum of Modern Art and The Metropolitan Museum of Art, both in New York.

2. Deluxe copies of 391, nos. 1–4, with hand-painted additions are held in the collection of the Bibliothèque littéraire Jacques Doucet, Paris.

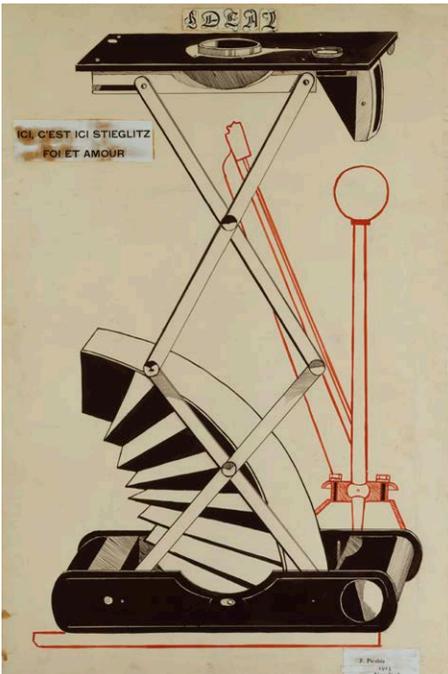


fig. 1

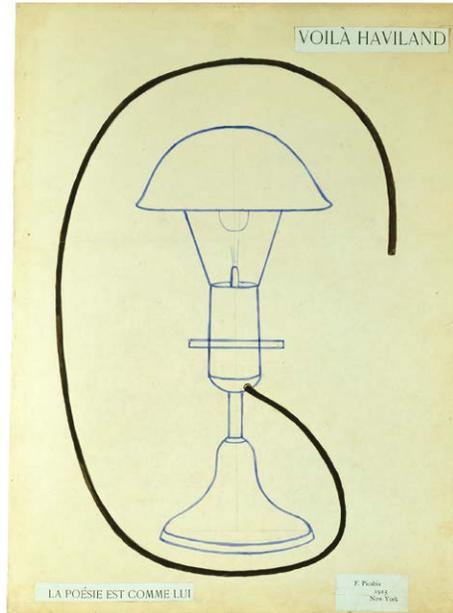


fig. 3

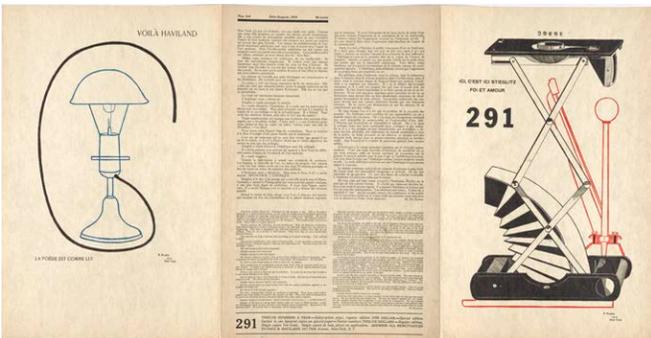


fig. 2b

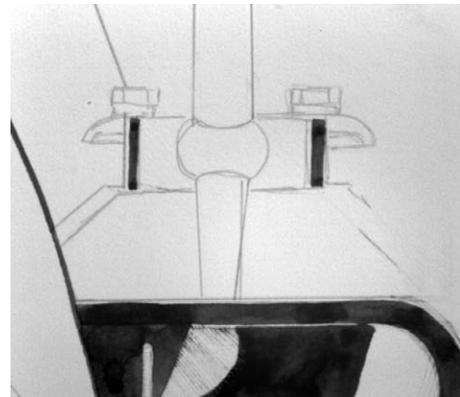


fig. 4

**fig. 1.** *Ici, c'est ici Stieglitz (Here, This Is Stieglitz Here)*. 1915. Ink and cut-and-pasted printed papers on board, 29<sup>7</sup>/<sub>8</sub> × 20" (75.9 × 50.8 cm). The Metropolitan Museum of Art, New York. Alfred Stieglitz Collection, 1949. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo © The Metropolitan Museum of Art/Art Resource, NY

**fig. 2b.** 291, nos. 5–6 (deluxe edition) (recto). Published July–August 1915, New York. Edited by Paul Haviland, Agnes E. Meyer, Alfred Stieglitz, and Marius de Zayas. Printed journal with illustrations by Francis Picabia. Letterpress, page (folded): 17<sup>3</sup>/<sub>4</sub> × 11<sup>3</sup>/<sub>8</sub>" (43.8 × 28.9 cm). The Museum of Modern Art Library, New York. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo: John Wronn, The Museum of Modern Art

**fig. 3.** *Voilà Haviland (Here Is Haviland)*. 1915. Ink, pencil, and cut-and-pasted printed papers on board, 25<sup>13</sup>/<sub>16</sub> × 18<sup>3</sup>/<sub>4</sub>" (65.5 × 47.7 cm). Kunsthaus Zürich. Graphische Sammlung. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo courtesy Kunsthaus Zürich

**fig. 4.** *Ici, c'est ici Stieglitz (Here, This Is Stieglitz Here)* (detail). Infrared image showing the pencil underdrawing in the lower right quadrant of the composition. Photo: Rachel Mustalish, The Metropolitan Museum of Art, 2016

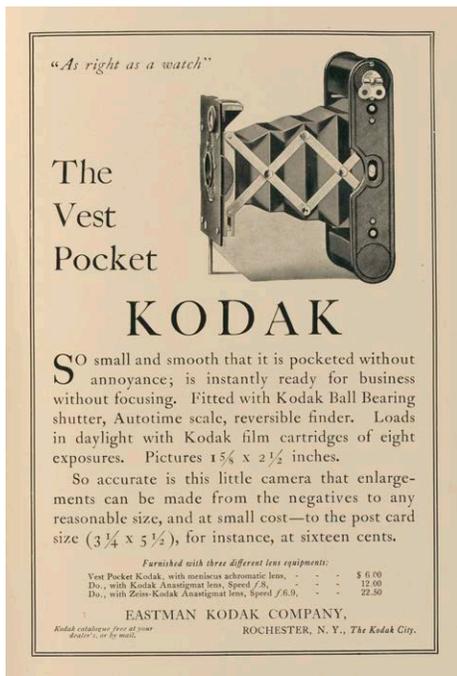


fig. 5

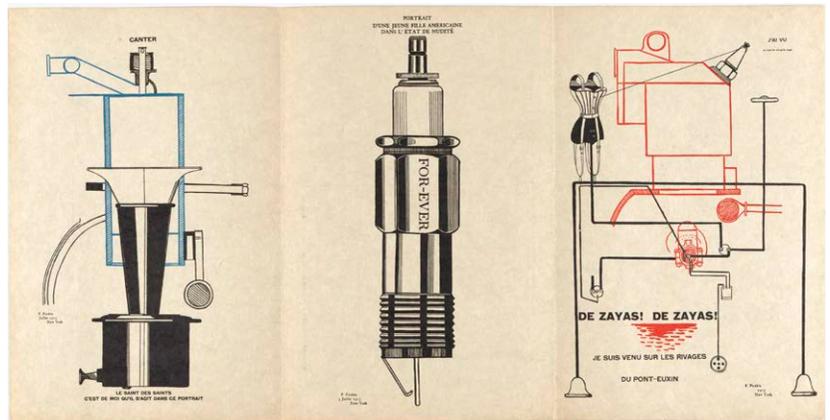


fig. 7

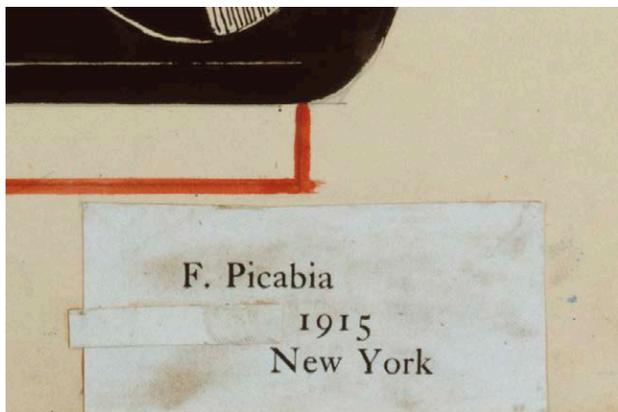


fig. 6

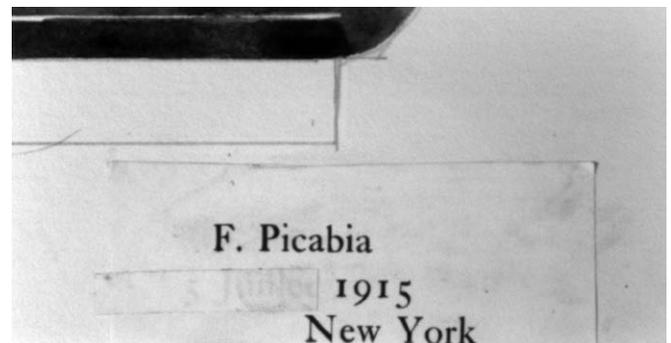


fig. 8

fig. 5. Advertisement for "The Vest Pocket Kodak," published in Alfred Stieglitz's journal *Camera Work*, no. XLV (June 1914). Department of Photography, The Museum of Modern Art. Photo: John Wronn, The Museum of Modern Art

fig. 6. *Ici, c'est ici Stieglitz* (detail). The "correction" strip of paper is visible to the left of the year. Photo © The Metropolitan Museum of Art/Art Resource, NY

fig. 7. 291, nos. 5–6 (deluxe edition) (verso). Showing *Le Saint des saints* (*The Saint of Saints*), *Portrait d'une jeune fille américaine dans l'état de nudité* (*Portrait of a Young American Girl in a State of Nudity*), and *De Zayas! De Zayas!* In the reproductions on the left and in the center, the day and/or month precede the year in the date below "F. Picabia." © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo: John Wronn, The Museum of Modern Art

fig. 8. *Ici, c'est ici Stieglitz* (detail). Infrared image with "5 Juillet" visible under the "correction" strip of paper. Photo: Rachel Mustalish, The Metropolitan Museum of Art, 2016



fig. 9

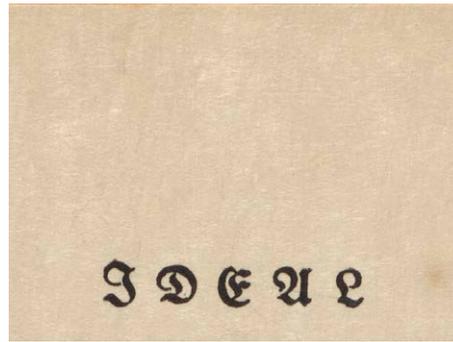


fig. 12

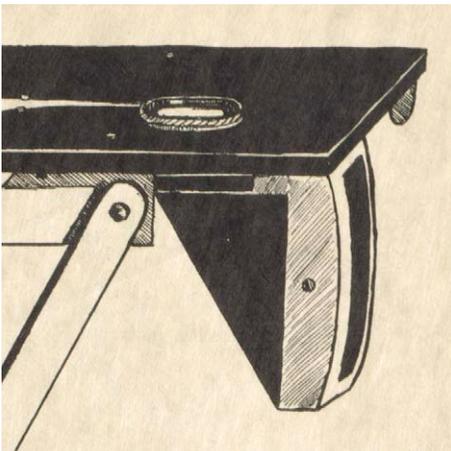


fig. 10



fig. 13



fig. 11



fig. 14

fig. 9. *Ici, c'est ici Stieglitz* (detail). The letters of the word "IDEAL" are more elaborate than the other texts in the maquette. The letters "I," "D," and "E" are on a secondary support paper. The letters are letterpress printed except for the hand-drawn "L." Photo © The Metropolitan Museum of Art/Art Resource, NY

fig. 10. *291*, nos. 5–6 (deluxe edition) (detail). The imperfect qualities of the hand-drawn lines are visible in the upper right quadrant of the cover of the printed journal. Photo © The Metropolitan Museum of Art/Art Resource, NY

fig. 11. *Ici, c'est ici Stieglitz* and *291*, nos. 5–6 (deluxe edition) (cover). Note the size difference between the larger maquette and the smaller printed journal. Photo: Rachel Mustalish, The Metropolitan Museum of Art, 2016

fig. 12. *291*, nos. 5–6 (deluxe edition) (detail). The printed version of "IDEAL" is substantially smaller than it appears in the maquette. Photo: John Wronn, The Museum of Modern Art

fig. 13. *291*, nos. 5–6 (deluxe edition) (detail). Micrograph of lower right quadrant of the composition, revealing the glossy hand-applied black ink that is visible over the black printed ink. Photo: Rachel Mustalish, The Metropolitan Museum of Art, 2016

fig. 14. Picabia and Marius de Zayas hand-tinting copies of *291* at Alfred Stieglitz's *291* gallery, with two prints of Picabia's *Fille née sans mère* (*Girl Born without a Mother*) hanging on the wall behind the artists, c. June 1915. Photo courtesy Archives Comité Picabia

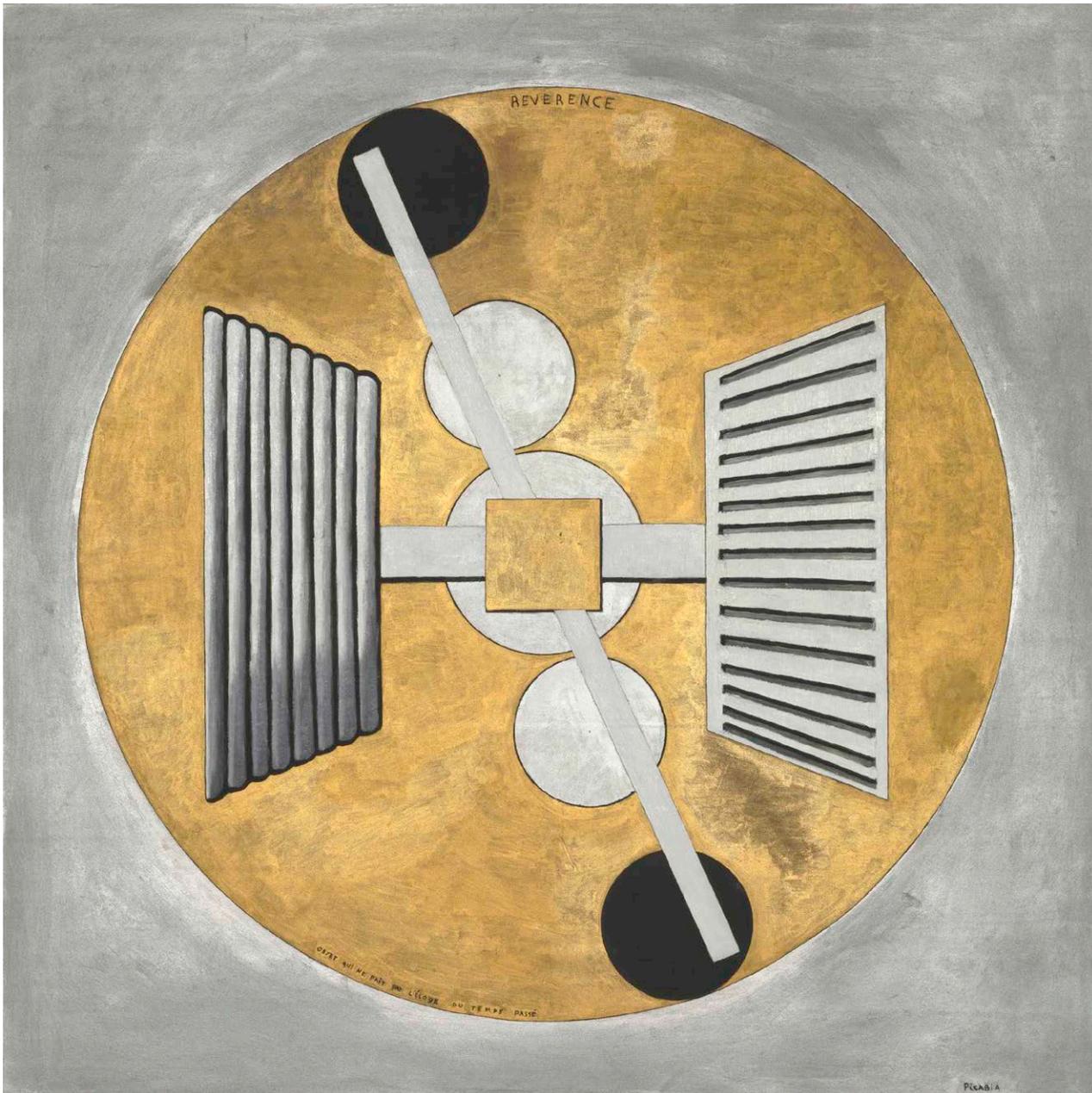


fig. 1. *Révérence* (Reverence). 1915. Oil and metallic paint on board, 39¼ × 39¼" (99.7 × 99.7 cm). The Baltimore Museum of Art. Bequest of Saidie A. May

Francis Picabia painted *Révérance* (*Reverence*) (fig. 1) in New York as part of a series of mechanomorphic works inspired by illustrations of machines. *Révérance* was created using oil, tempera, and metallic paints on a commercially manufactured square board. Whether this use of a building-grade product was intended to transform or elevate this common material to the realm of fine art is debatable. Nonetheless, the choice is intriguing, particularly considering Picabia's interest in industrial imagery. Indeed, a possible source for *Révérance* is a photograph of workers attending to a dough-making machine, from the popular French science magazine *La Science et la Vie* (fig. 2).<sup>1</sup>

This work's unusual support is composed of a wooden core, faced both front and back with thick, brown paper; overall, it is approximately one-quarter-inch thick. Manufacturing stamps on the back are only partially legible (fig. 3), but they indicate that the support's manufacturer was based in Minnesota. One stamp on the verso (fig. 4) includes a logo emblazoned with the word "Board," written in italics and underlined, with the words "TRADE MARK" appearing below. The logo includes a diagram of the board's construction. The font of a partially legible inscription, "[BOA]RD COMPANY," could perhaps be identified as Clarendon Ornamented font, an original wood typeface designed by William H. Page in 1859 for letterpress printing.<sup>2</sup> This partially obscured manufacturer's stamp can be interpreted as "[THIS SI]DE OF BOARD [MUST] GO NEXT TO [ST]UDDING." While these partial inscriptions do not allow for the definitive identification of the manufacturer, there were at least two companies producing boards of this type in Minnesota around 1915: the Minnesota and Ontario Paper Company (known as the Mando Paper Company), and Waldorf Paper Products Company (formerly Waldorf Box Board Company).<sup>3</sup> Picabia was known to use illustration board from New York art suppliers, such as E.H. & A.C. Friedrichs Co., in addition to high-quality veneered boards. However, *Révérance* is the only documented example of his use of this particular type of laminated board, originally manufactured as a building material.<sup>4</sup> Further study of the versos of the many works on board that Picabia produced may provide useful comparative information.

An X-ray image (fig. 5) of the painting shows thin, horizontal white lines running the full width of the board, spaced approximately one inch apart. The lines correspond to fine gaps in the interior core that are visible along the sides when the work is viewed unframed. This indicates that the core consists of strips of wood that have been joined with an adhesive containing lead. Nails and screws attaching the panel

to an auxiliary wooden strainer are also visible in the X-ray image. A close examination of the surface under normal lighting conditions reveals small holes at the center of the painted circles, which were produced by the point of a compass that Picabia used to outline the circular elements of the composition. Compass holes are also visible in other works from this period, including *M'Amenez-y* (*Bring Me There*) (fig. 6).

A traditional, overall priming layer was not applied to the composition. Rather, each color was painted with a brush directly onto the board, with gaps in the paint application exposing the brown, fibrous paper face. This type of paint application is also consistent with later mechanomorphs, including *M'Amenez-y*. X-ray examination did not reveal that the artist made any changes to the work. It did, however, confirm that the white diagonal and horizontal elements are not present under the square at center. The white elements about the perimeter of the square, with black paint covering the transition between the forms (fig. 7).

Scientific analysis using X-ray fluorescence was conducted to determine the elemental composition of the metallic and oil-based paints. The results revealed zinc in the silver paint of the background surrounding the gold circle, and in the upper circle to the right of the white diagonal stripe. Lesser amounts of aluminum, copper, and iron were also detected. Several areas inside the large gold circle were also investigated. Copper was the predominant element detected in these areas, with lesser amounts of zinc and iron present. The high copper content partly explains why the gold color has a warm tone and an uneven appearance. Analysis of metallic paints in *L'Enfant carburateur* (*The Child Carburetor*) (fig. 8), a later mechanomorph similar in style to Picabia's work of 1915, yielded comparable results.<sup>5</sup> Additional analyses of the oil-based paints were conducted. The white diagonal stripe proved to be composed of zinc, while the white paint of the large rhomboid at right was composed of zinc with titanium. Analysis also indicated that the black paint of the upper circle is possibly carbon black, based on the iron, calcium, zinc, and either arsenic or lead composition.

Examination of *Révérance* under magnification, combined with visual observation, suggests that the artist used several types of paint. The whites, which bear a low sheen, appear to be oil-based. The black circles, outlines, and letters, which are very matte, are likely tempera. Picabia was interested in machines and industrially produced materials; this extended to his use of commercial (as opposed to tube oil) paints.

The silver and gold areas of *Révérance* are consistent in composition with widely available, oil-based metallic paints used for radiators and other interior finishes, which could be easily applied with a brush rather than the more laborious and expensive gold and silver leaf applications.<sup>6</sup> In fact, Picabia would go on to thoroughly embrace commercial enamel paints for his most ambitious compositions in the 1920s. The frame for *Révérance* (fig. 9) also has a silver sheen similar to the background of the composition, suggesting it may have been painted by Picabia and intended for the work.<sup>7</sup>

Picabia continued to adopt and use new, non-fine-art materials throughout his long career. The circular composition of *Révérance*, with its rotating elements, also finds many echoes, including the artist's assertion seven years later that "our heads are round so our thoughts can change direction."<sup>8</sup>

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1. Arnauld Pierre, "Sources inédites pour l'œuvre machiniste de Francis Picabia, 1918–1922," *Bulletin de la Société de l'Histoire de l'Art Français* (1991), 274.

2. Victoria Kaak, Graphic Designer, The Baltimore Museum of Art, suggested that this may be the typeface on the manufacturer's stamp.

3. For information on the Minnesota and Ontario Paper Company, see *The Story of Mando: Minnesota and Ontario Paper Company Forest Products: On the Fringe of a Primitive Wilderness* (International Falls, Minn.: Minnesota and Ontario Paper Company, [1931–41]), in the library of the Minnesota Historical Society. For information on the history of the Waldorf Paper Products Company, see the records of the Hoerner Waldorf Corporation, in the archives of the Minnesota Historical Society. Accessed online: <http://www2.mnhs.org/library/findaids/00490.xml>.

4. Two *New York* watercolors (both 1913), in the collection of The Art Institute of Chicago, were found to be on illustration board from the art supplier E.H. & A.C. Friedrichs Co. *L'Enfant carburateur* (*The Child Carburator*) (1919) is executed on a high-quality laminated wood board, although no manufacturer's inscriptions were noted. Michael Duffy, Unpublished examination reports (2014–16).

5. Federica Pozzi, Unpublished X-ray fluorescence results report on Francis Picabia's *The Child Carburator* (1919), Department of Conservation, Solomon R. Guggenheim Museum (June 18, 2015).

6. Picabia used gold pigment in his painting *Edtaonisl (écclésiastique)* (*Edtaonisl [Ecclesiastic]*) (1913), while gold and silver leaf is found in other works, including *Très rare tableau sur la terre* (*Very Rare Picture on the Earth*) (1915) and *L'Enfant carburateur* (*The Child Carburator*) (1919).

7. Research on the original frames that accompany some works by Picabia is in its early stages. Later in his career, Art Deco designers Pierre Legrain and Rose Adler created elaborate frames with luxurious finishes for certain paintings, drawings, and collages.

8. Originally published by the artist on the cover of *La Pomme de pins* (*The Pinecone*) (Saint-Raphaël, February 25, 1922).

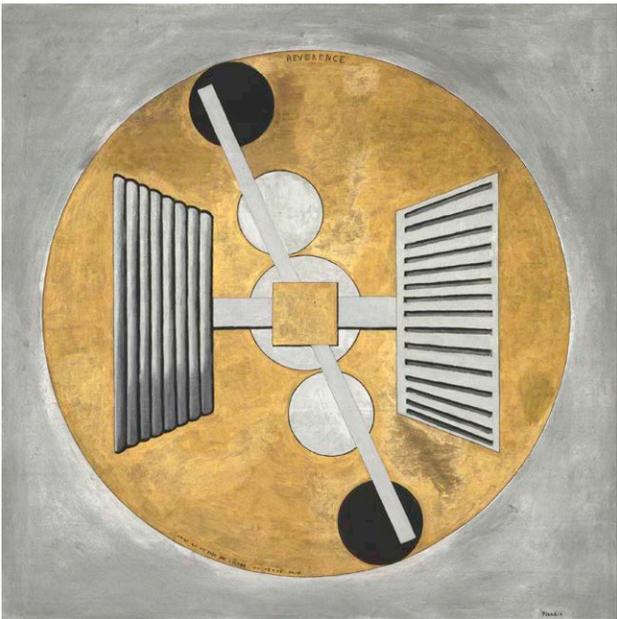


fig. 1



fig. 3



fig. 2

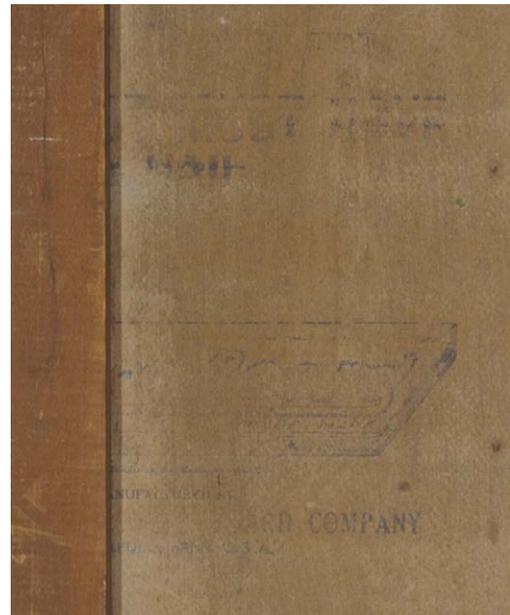


fig. 4

fig. 1. *Révérence* (Reverence). 1915. Oil and metallic paint on board, 39¼ × 39¼" (99.7 × 99.7 cm). The Baltimore Museum of Art. Bequest of Saidie A. May. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo: Mitro Hood, The Baltimore Museum of Art

fig. 2. *Marcheuse ou marche à pâtes* (Machine for mixing dough). Illustration accompanying the article, "La Science appliquée à la Céramique" ("Science Applied to Ceramics"), by H. Le Chatelier, published in *La Science et la Vie*, no. 9 (December 1913): 292. Photo courtesy The New York Public Library

fig. 3. *Révérence* (verso). Photo: Mitro Hood, The Baltimore Museum of Art

fig. 4. *Révérence* (detail, verso). Image of lower center showing manufacturer's stamp. Photo: Mitro Hood, The Baltimore Museum of Art

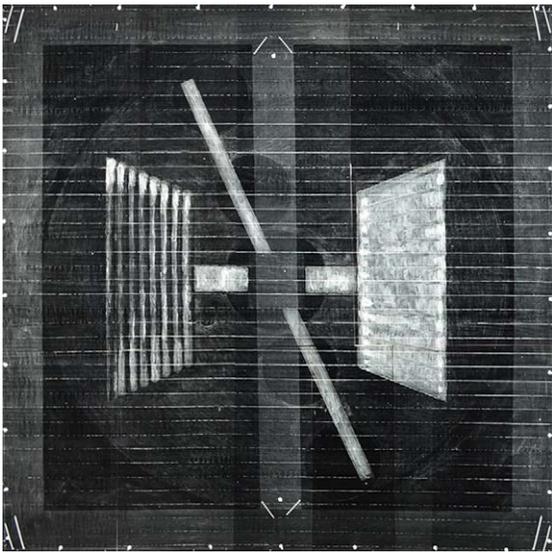


fig. 5



fig. 7

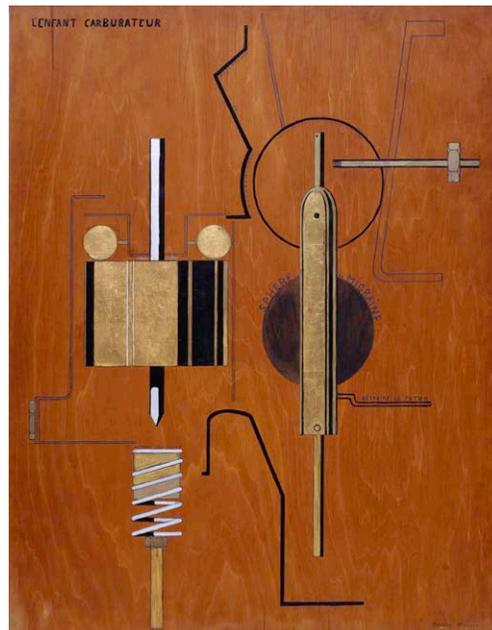


fig. 8



fig. 6

fig. 5. *Révérence*. Composite digital X-ray. The louvered wings with struts flanking the central square and the diagonal white bar are painted in zinc white and appear opaque in the X-ray image. Photo: Mitro Hood, The Baltimore Museum of Art

fig. 6. *M'Amenez-y (Bring Me There)*. 1919–20. Oil and enamel paint on board, 50 3/4 x 35 3/8" (129.2 x 89.8 cm). The Museum of Modern Art, New York. Helena Rubinstein Fund, 1968. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo: John Wronn, The Museum of Modern Art

fig. 7. *Révérence* (detail). The central square is outlined in black with adjacent white paint application. The compass hole is covered in gold paint and is visible in the center of the square. Photo: Mitro Hood, The Baltimore Museum of Art

fig. 8. *L'Enfant carburateur (The Child Carburetor)*. 1919. Oil, enamel paint, metallic paint, gold leaf, pencil, and crayon on wood, 49 3/4 x 39 7/8" (126.3 x 101.3 cm). Solomon R. Guggenheim Museum, New York. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo courtesy The Solomon R. Guggenheim Foundation

fig. 9. *Révérence*. Shown in a frame that is thought to be original. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo courtesy The Baltimore Museum of Art

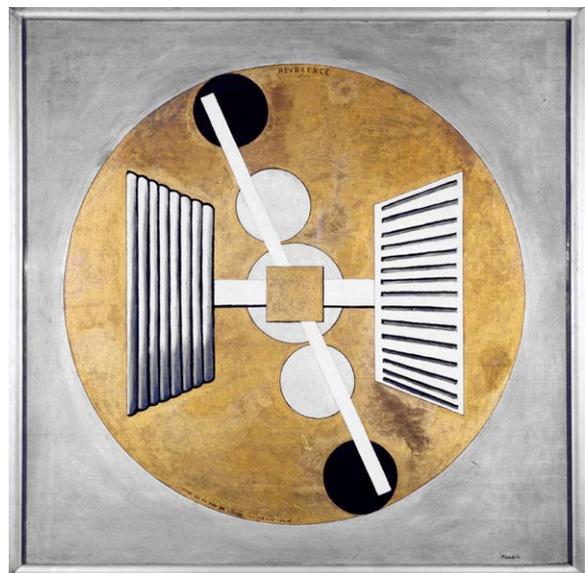


fig. 9

**Le Lierre unique eunuque**

Hanspeter Marty, Chief Conservator, Kunsthau  
Zürich; Milena Furrer, Master's Candidate,  
Bern University of the Arts; and Karolina Soppa,  
Lecturer, Conservation and Restoration, Bern  
University of the Arts

**MOMA**



fig. 1. *Le Lierre unique eunuque* (*The Unique Eunuch Ivy*). 1920.  
Enamel paint and metallic paint on board, 29½ × 41½" (75 × 105 cm).  
Kunsthau Zürich

*Le Lierre unique eunuque* (*The Unique Eunuch Ivy*) (fig. 1) is one of the later works in a series of mechanomorphic pictures Francis Picabia began around 1915. These works are often said to have been inspired by Picabia's various visits to New York during the 1910s, where he developed a fascination with machines, cars, and many kinds of technical devices. This interest may relate to society's emerging enthusiasm for technology and machines in general.<sup>1</sup> The inscription parallel to the painting's left edge—"MACHiNE Co."—is an obvious reference to Picabia's penchant for machine-related subject matter. Although the shapes are more like cells than machine parts, the silver layer of paint, together with the gray-scale shades, give the entire painting a metallic, industrial character.

These types of shapes are not found in any other works by Picabia; their configuration recalls a map of some imaginary archipelago, while also evoking cellular forms or the cross-sections of vertebrae. The individual shapes may derive from source materials that Picabia was known to consult, such as the popular French scientific magazine *La Science et la Vie*. The target shape at bottom left recalls forms found in many of Picabia's works, among them *La Nuit espagnole* (*The Spanish Night*) (fig. 2). It might also be read as a wheel, which is considered the epitome of mechanical progress. Circles in Picabia's pictures are often derived from diagrams of targets, wheels, gears, gramophone records, and planets.<sup>2</sup>

*Le Lierre unique eunuque* was painted on a rigid, light brown, pressed board. An overall X-ray image of the painting (fig. 3) confirmed that no major compositional shifts occurred as Picabia worked on it. A detail of the X-ray image (fig. 4, top) shows that minuscule angular particles of varying sizes (less than five millimeters each) are embedded in the support. Due to their pale appearance in the X-ray image, it can be assumed that these are dense metallic inclusions. For comparison, two samples of cardboard (fig. 4, bottom) from an archive of paper references were also X-rayed to determine whether metallic particles are typically found in board.<sup>3</sup> Smaller but similar particles were discovered in the board samples, which can be explained by the fact that the two samples were of thinner board than that used by Picabia. *Le Lierre unique eunuque*'s board support, and paper-based boards like it that were available to artists in the 1920s, usually included metallic particles.

At first glance, Picabia's method of paint application appears to be straightforward. There is no preparatory layer, and the main colors—black, white, gray, and

silver—were directly applied, side-by-side and unmixed, onto the painting's surface. As a result, the board and the Prussian blue underpainting, which could also be an underdrawing, can be glimpsed between the fields of color (fig. 5). Colors were applied in the following sequence, using the blue underpainting as a guide. First, Picabia painted the black words and the outlines of the cell forms. The white and silver layers of paint were then added, followed by the gray background paint (fig. 6). At least two layers of white paint can be observed; in some areas additional black paint was added to slightly redefine the shape's contours. This suggests that Picabia's methodical, almost mechanical, paint application was more labor-intensive than first meets the eye.

The artist signed *Le Lierre unique eunuque* twice in the bottom right-hand corner of the composition. The first signature was incised into the fresh paint, probably with the handle of a paintbrush. The second signature was written in black paint (fig. 7). Both the "unique" in the title phrase and Picabia's black signature were painted on top of the already dry background color, and are therefore not visible in the X-ray image (figs. 3, 8 [top]). The fact that Picabia added the word "unique" and his black signature once the painting had already been finished suggests that, despite his spontaneous and rapid method of execution, he still retained works for some time and most certainly made changes to them later.

Further scientific analysis was conducted to confirm the type of oil-based enamel paint Picabia used. Microscopic samples taken from the painting were analyzed for the composition of binding media and pigments using energy dispersive X-ray analysis, backscattered electron, Fourier transform infrared spectrometer, Raman, and polarized light microscopy. While the gray, black, and white colors show a paint system similar to that of conventional pigments, the granular silver paint is made up of tiny flakes of aluminium and iron (silicate). Notably, the presence of zinc in the white and gray paints helps to identify the paint as a commercial enamel paint, such as Ripolin. The surface appearance, with its wavy drying patterns and glossy tone, also indicates Picabia used enamel paints rather than tube oil paints to construct *Le Lierre unique eunuque*.<sup>4</sup>

Under close examination, the surface of *Le Lierre unique eunuque* shows signs of rust-brown discolored spots, which were recorded for the first time in 1990. Some of these discolorations are hardly visible, while others are as large as four millimeters in diameter.

They are believed to have been caused by the presence of metal ions in the paint layer or in the painting's board support (fig. 9). These types of discolorations, similar to foxing, are sometimes observed in aged paper supports. Brown spots can also be observed in other Picabia paintings on board from this period, including *M'Amenez-y* and *Parade amoureuse (Amorous Parade)*, indicating that *Le Lierre unique eunuque* is not unique in this one respect.

- 
1. Marianne Heinz, "Biography," in *Francis Picabia* (Cologne: Dumont Buchverlag Köln with Städtische Kunsthalle Düsseldorf and Kunsthaus Zürich, 1984), 201.
  2. William A. Camfield, *Francis Picabia: His Art, Life, and Times* (Princeton: Princeton University Press, 1979), 192–193.
  3. Hans Kotte, *Welches Papier ist das?* (Stuttgart: Franckh, 1959), sample nos. 259, 260.
  4. For a discussion of Picabia's use of Ripolin enamel paints see Annette King, et al., "The Use of Ripolin by Picabia in *The Fig Leaf* (1922)," *Journal of the American Institute for Conservation* 52, no. 4 (2013): 246–257.

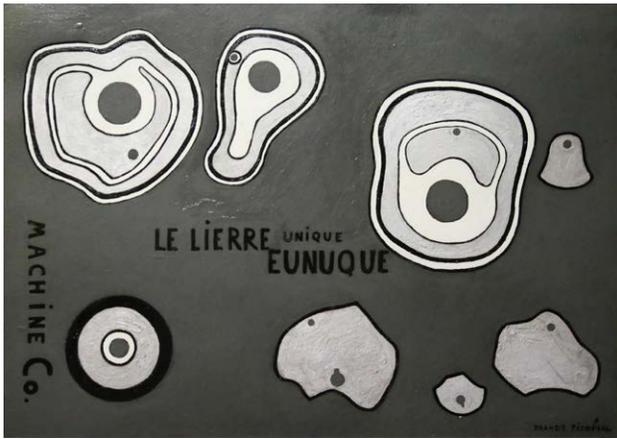


fig. 1

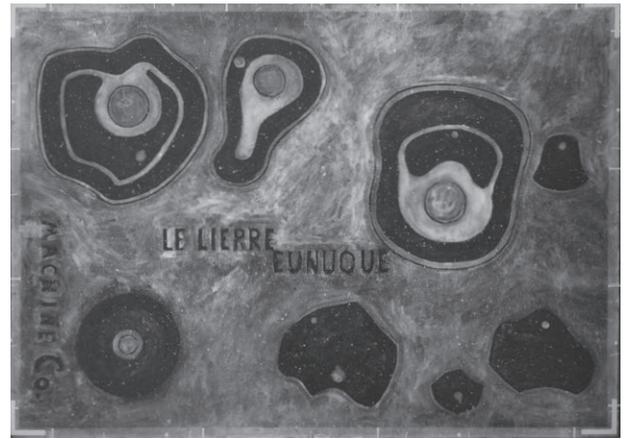


fig. 3



fig. 2

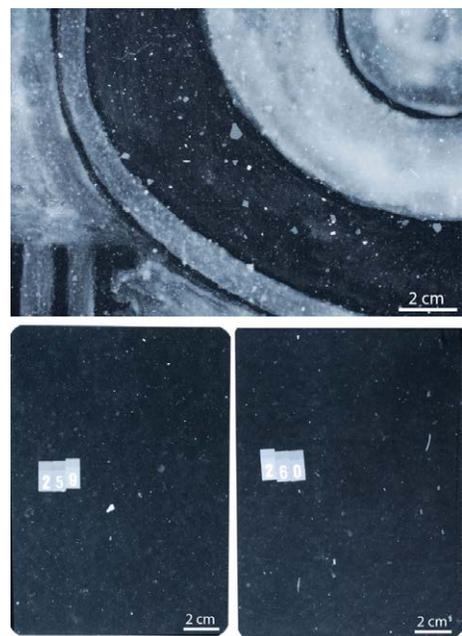


fig. 4

**fig. 1.** *Le Lierre unique eunuque* (*The Unique Eunuch Ivy*). 1920. Enamel paint and metallic paint on board, 29½ × 41¾" (75 × 105 cm). Kunsthau Zürich. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo © Milena Furrer HKB

**fig. 2.** *La Nuit espagnole* (*The Spanish Night*). 1922. Enamel paint and oil on canvas, 63 × 51¾" (160 × 130 cm). Museum Ludwig, Cologne. Ludwig Collection. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo © Rheinisches Bildarchiv Köln

**fig. 3.** *Le Lierre unique eunuque*. Digital X-ray image. Photo © Thomas Becker HKB

**fig. 4.** Top: Detail of X-ray image of center right of *Le Lierre unique eunuque*, showing metallic particles embedded in support. Since the denser metallic pigments block the X-rays, they appear as lighter spots. Bottom: X-ray image of cardboard samples nos. 259 and 260 from Kotte Comparison. These samples reveal similar metallic inclusions, suggesting that it was normal for paper manufacturers to include some metallic additives. Photos © Thomas Becker HKB



fig. 5

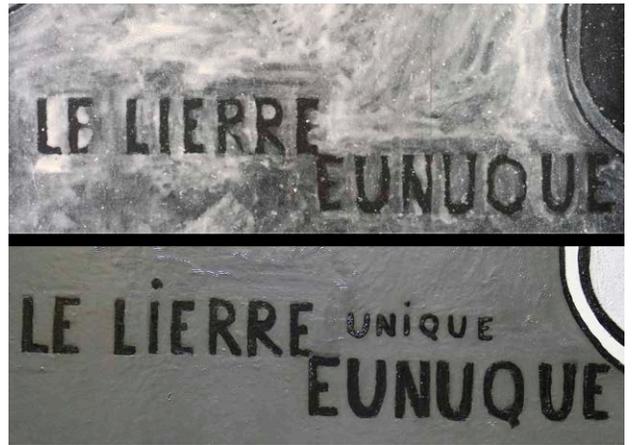


fig. 8

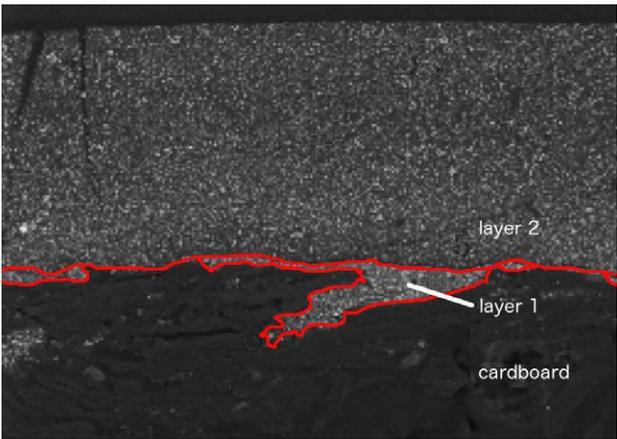


fig. 6

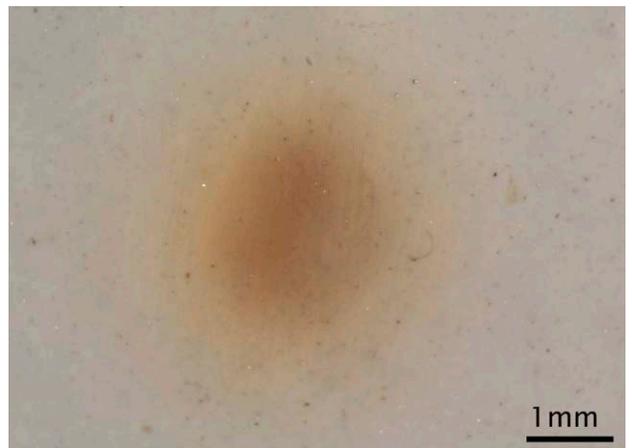


fig. 9



fig. 7

fig. 5. *Le Lierre unique eunuque* (detail). Micrograph showing the blue underpainting and brown cardboard between the silver and gray paints. Photo © Milena Furrer HKB

fig. 6. *Le Lierre unique eunuque*. The two-layer structure is visible on the backscattered electrons image of the rough-surfaced gray color. Photo © Nadim Scherrer HKB

fig. 7. *Le Lierre unique eunuque* (detail). Signatures seen in raking light. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo © Milena Furrer HKB

fig. 8. *Le Lierre unique eunuque* (details). Title phrases, comparing the X-ray image (top) with the image under normal light conditions (bottom). The word "unique" cannot be seen in the X-ray image. Photo © Thomas Becker HKB

fig. 9. *Le Lierre unique eunuque*. Micrograph of rust-brown discoloration in the white paint. Photo © Milena Furrer HKB

**La Feuille de vigne**

Annette King, Paintings Conservator, Joyce H. Townsend, Senior Conservation Scientist, and Bronwyn Ormsby, Principal Conservation Scientist, Tate

**MOMA**

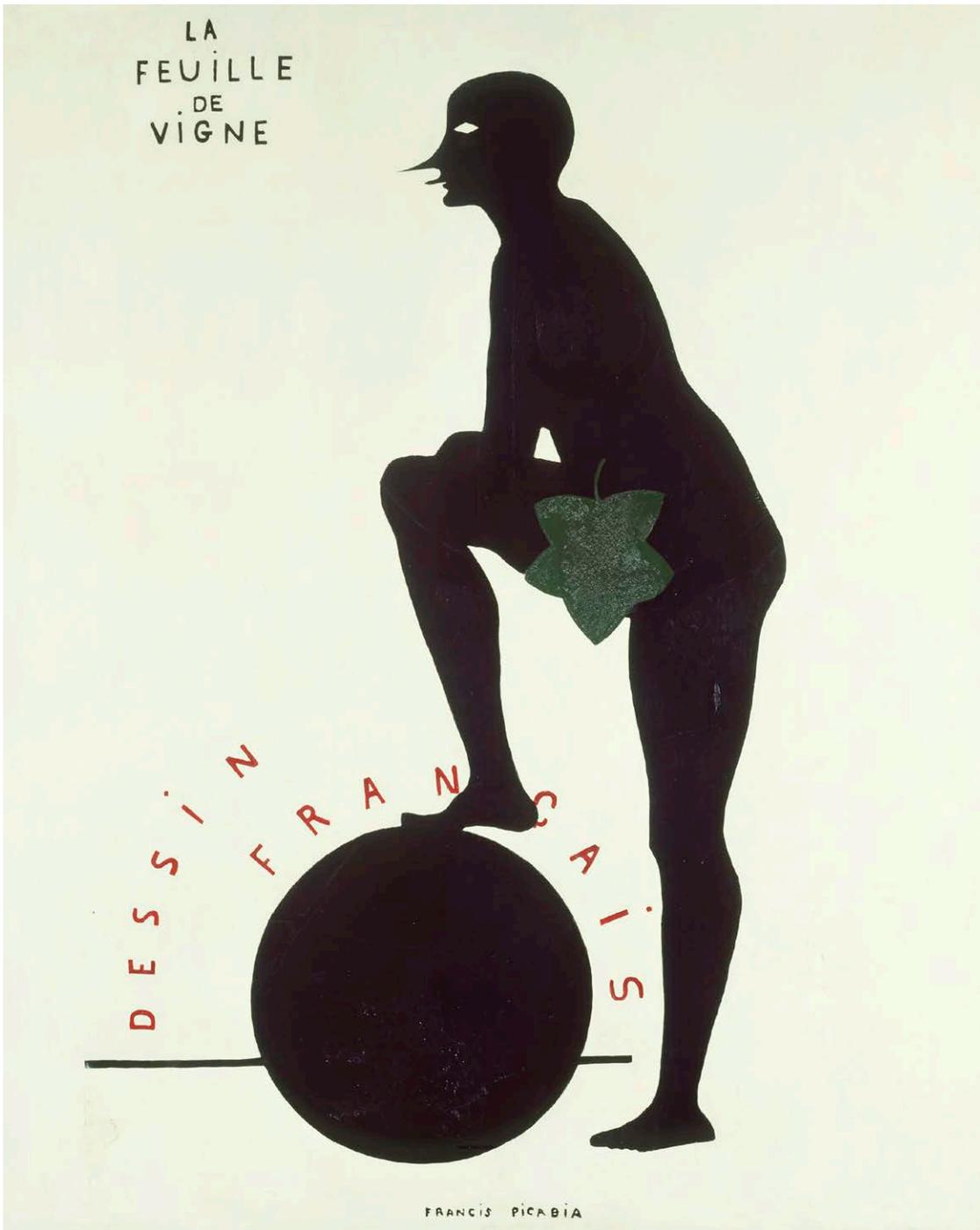


fig. 1. *La Feuille de vigne* (The Fig Leaf). 1922. Oil and enamel paint on canvas, 78¾ × 62¾<sup>16</sup> (200 × 160 cm). Tate. Purchased 1984

*La Feuille de vigne* (*The Fig Leaf*) (fig. 1) is a grand-scale salon painting, first exhibited at the official Salon d'Automne in Paris in November 1922. Francis Picabia's title, *La Feuille de vigne*, draws attention to the prominent green leaf that functions as a *cache-sexe*, associated with both censorship and prudery. *La Feuille de vigne* is also notable because Picabia painted it on top of an earlier painting, originally known as *Les Yeux chauds* (*Hot Eyes*) (figs. 2, 3), which he exhibited at the Salon d'Automne in 1921.

Both *Les Yeux chauds* and *La Feuille de vigne* were intended to challenge the conservative art establishment in France after World War I. *Les Yeux chauds* was inscribed "REMERCIEMENTS AU SALON D'AUTOMNE" ("Thank you to the Salon d'Automne") and "HOMMAGE A FRANTZ JOURDAIN" ("Homage to Frantz Joudain"), a reference to the Salon's president that year. These inscriptions pay superficial tribute to Jourdain and the institution, while simultaneously mocking the salon and its conservative ways. Picabia inscribed the word "FAUX" ("false" or "fake") at the base of a line held by a large hand. Another inscription, "L'OIGNON FAIT LA FORCE" ("The onion makes the force"), hinted at the painting's Dada roots by adding a touch of farce. Picabia based *Les Yeux chauds* on an illustration of an air brake turbine that was published in the journal *La Science et la Vie* in 1920 (fig. 4). This radical gesture of flaunting subject matter copied from a popular science magazine fanned the flames of outrage among the official art world and public alike.

Picabia ultimately censored *Les Yeux chauds* by overpainting it to produce an entirely new composition. *La Feuille de vigne* features a classical male nude poised with his foot on a sphere, a reference to the famous Ingres painting in the Louvre, *Oedipus and the Sphinx* (1808) (fig. 5). Picabia infused his adopted subject matter with parody (figs. 6a–c). He altered the pose of his Oedipus and added a prominent fig leaf in a mocking gesture of modesty (figs. 7a–c). Ingres's famous statement that "drawing is the probity of art" was flouted by Picabia, who executed the whole painting in commercial house paint and added the inscription "DESSIN FRANÇAIS" ("French Drawing") to emphasize his dismissal of Ingres's academic point of view.<sup>1</sup>

Historical commentators and friends of Picabia maintained that he used a brand of enamel paint called Ripolin in the early 1920s. The characteristic gloss, wrinkling, and dense coloration of this commercial enamel paint are evident in *La Feuille de vigne* and support this observation (fig. 7c). Scientific analysis

combined with visual comparison to samples of Ripolin paint from the same period have made it possible to conclude that Picabia used these paints in both *Les Yeux chauds* and *La Feuille de vigne*.<sup>2</sup>

Clues to the underlying colors belonging to the earlier composition were also detected around the edges and in paint losses on *La Feuille de vigne* (figs. 8a–e). Using this information, a color reconstruction of *Les Yeux chauds* was made, enabling contemporary viewers to imagine the original appearance of this controversial painting (fig. 9). The borders around the inscriptions also allowed inspection of lower paint layers since Picabia typically left these areas in reserve (figs. 10a–e). This methodical technique is evident in other Salon Ripolins, including *La Nuit espagnole* (*The Spanish Night*) (fig. 11) and *Dresseur d'animaux* (*Animal Trainer*) (fig. 12). An X-ray examination of *La Feuille de vigne* showed that Picabia left larger areas in reserve, such as the central fig leaf (fig. 7b), indicating that he treated this element as an essential and premeditated part of the composition rather than adding it as an afterthought.

Ultimately, the weight of the paint layers, combined with the fragility of the canvas, has affected the structural integrity of the painting (figs. 13 a–c). Not wishing to compromise the painting's preservation by exposing it to the rigors of transport unfortunately meant that *La Feuille de vigne* could not be included in the exhibition at the Kunsthau Zürich and The Museum of Modern Art, New York.

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1. Sarah Wilson, *Francis Picabia: Accommodations of Desire*, (New York: Kent Fine Art, 1989), 24n3.

2. Annette King, et al, "The Use of Ripolin by Picabia in *The Fig Leaf* (1922)," *Journal of the American Institute for Conservation* 52, no. 4 (2013), 250.

Acknowledgements: Grateful thanks to the Clothworkers' Foundation, who generously supported the two-year technical study of Picasso, Picabia, and Ernst at Tate between 2014 and 2016. Warm thanks to Beverley Calté of the Comité Picabia for sharing their archive, especially the album of Olga Mohler Picabia before it was published, and for generously sharing the photograph of *Les Yeux chauds*. Thanks also for her help, advice, and encouragement, which has been invaluable throughout the project. Thanks to Suzanne Nagy of the Comité Picabia, and to Tate Photography, particularly Marcella Leith, Mark Heathcote, Rod Tidnam, Joe Humphries, Jo Fernandes, Lucy Dawkins, and Rose Hillson-Summers, for the instructive images they contributed to this project. Thanks also to Tate Art Handling and Registrars for continued access to the painting. The digital X-ray equipment was acquired by Tate with support from the Cohen Foundation, and we thank Lord and Lady Ronald Cohen for this generous gift. Some of the images were made with a HIROX KH-8700 digital microscope, the purchase of which was supported in part by the Horizon2020 funded NANORESTART project (agreement 646063). We also thank Lora Angelova, Tate, who contributed to the analysis of this work.

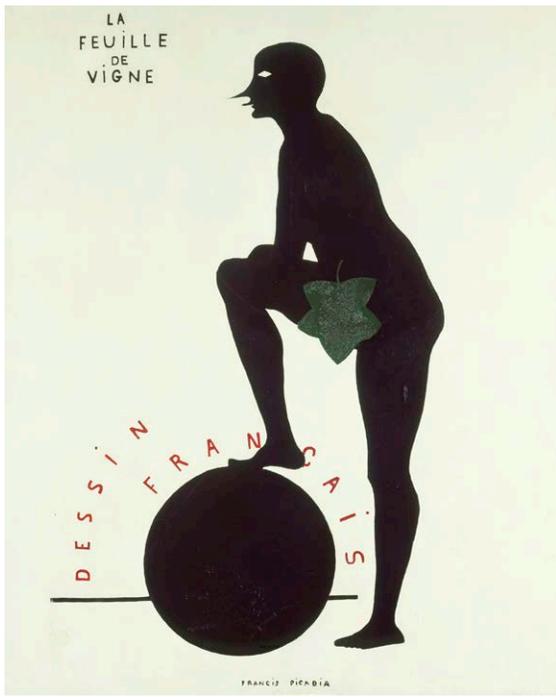


fig. 1

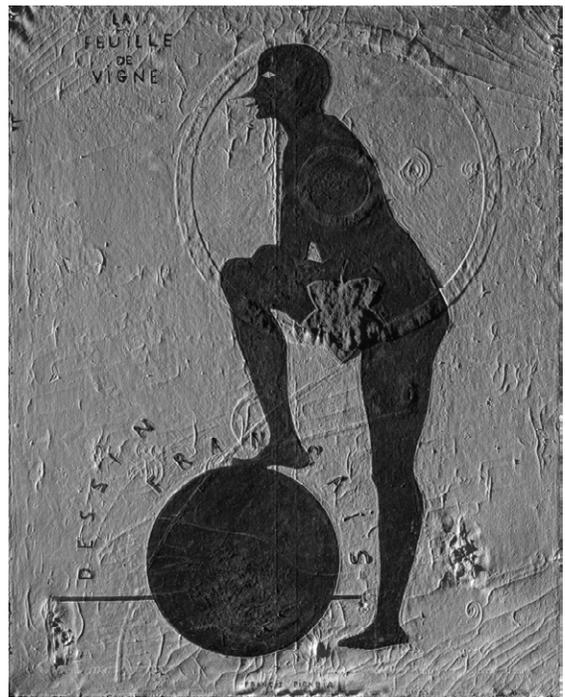


fig. 3

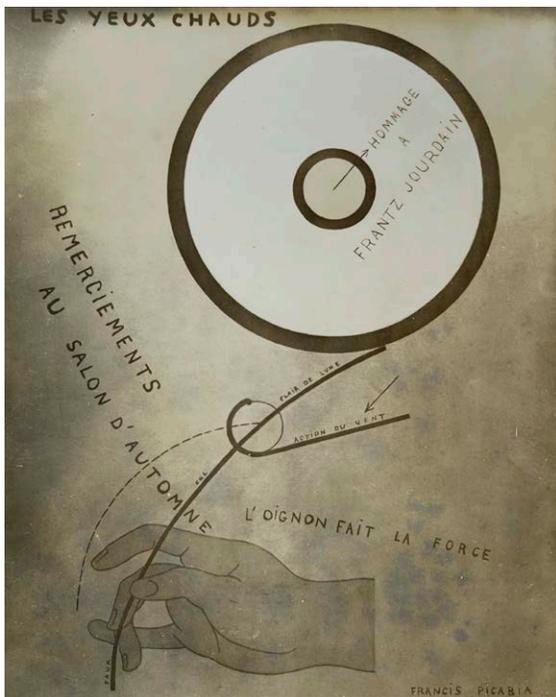


fig. 2

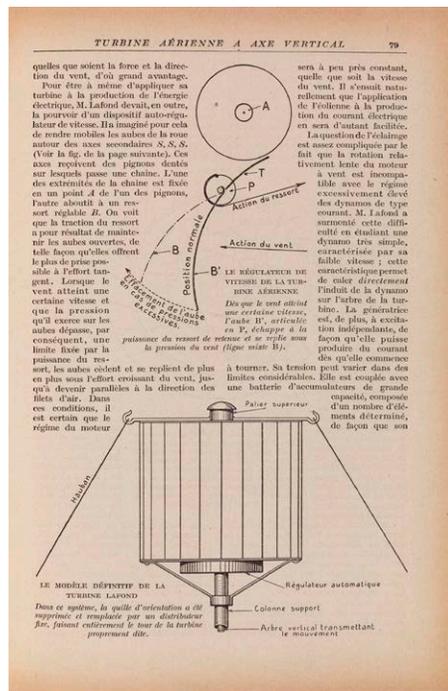


fig. 4

fig. 1. *La Feuille de vigne* (The Fig Leaf). 1922. Oil and enamel paint on canvas, 78¾ x 62¾" (200 x 160 cm). Tate. Purchased 1984. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo © Tate, London 2016

fig. 2. *Les Yeux chauds* (Hot Eyes). 1921. The artist painted *La Feuille de vigne* over this work. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo courtesy Archives Comité Picabia

fig. 3. *La Feuille de vigne*. Photograph in raking light from the left, revealing features of the underlying composition of *Les Yeux chauds*. Photo © Tate, London 2016

fig. 4. *Le régulateur de vitesse de la turbine aérienne* (The speed regulator of the aerial turbine). Illustration accompanying "Une nouvelle turbine aérienne à axe vertical" ("A new aerial turbine with a vertical axis") by Gérard Pyramont, published in *La Science et la Vie*, no. 51 (July 1920): 79. Photo © Tate, London 2017



fig. 5



fig. 6a

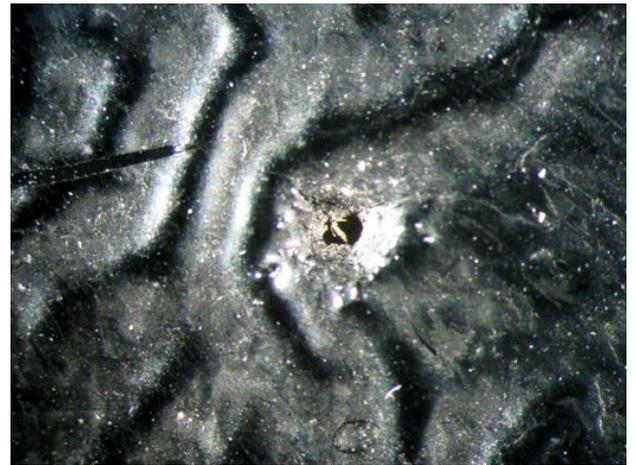


fig. 6b



fig. 6c

fig. 5. Jean-Auguste-Dominique Ingres. *Oedipus and the Sphinx*. 1808. 74<sup>7</sup>/<sub>16</sub>" × 56<sup>11</sup>/<sub>16</sub>" (189 × 144 cm). Musée du Louvre. Bequest of the Comtesse Duchâtel, 1878. Photo courtesy Scala/Art Resource, NY

figs. 6a-c. *La Feuille de vigne* (details). When Picabia painted *La Feuille de vigne* on top of *Les Yeux chauds*, he painted the black figure (fig. 6a) and ball first, then added the white up to the borders. A compass hole (fig. 6b) visible in the center large black circle has a corresponding black stain (fig. 6c) at the reverse where the paint has seeped through. This suggests that black was the first color applied to the revised painting. By creating distinct areas of paint that abut one another but do not overlap, Picabia did not have to wait for under-layers to dry, and this would have increased the speed of execution. Photos © Tate, London 2016



fig. 7a



fig. 7b



fig. 7c

**figs. 7a–c.** *La Feuille de vigne* (details). By adding a prominent fig leaf to his standing male figure (fig. 7a), Picabia mockingly drew attention to his figure's nudity and classical pose. X-ray imaging did not reveal any hidden anatomy under the leaf; instead Picabia left this area in reserve before adding the thick green paint layer (fig. 7b). Scientific analysis of the green paint of the fig leaf found it to contain lead chromate, Prussian blue, chalk, and traces of barium sulfate, which resembles the dark green Ripolin color *Vert irlandais foncé* (82) (in historic Ripolin paint swatches at The Art Institute of Chicago). This area of thickly applied paint wrinkled dramatically as it dried, which may have been caused by the slow drying of enamel paint over earlier oil layers (fig 7c). These characteristic drying patterns typically occur in passages of thickly applied enamel paint. In this case, as the under-layer is non-porous, the upper skin dried first and the lower layers remained soft. As the lower layers dried, forces contorted the upper layers into wrinkled patterns. It is also possible that Picabia bought a type of paint that was designed to wrinkle. Photos © Tate, London 2016



fig. 8a



fig. 8c



fig. 8b



fig. 8d



fig. 8e

**figs. 8a–e.** *La Feuille de vigne* (details). Magnification showing the underlying paint colors related to *Les Yeux chauds*. Around the edges of the painting there is a border of turquoise paint (fig. 8a), which is also visible at the top right corner (fig. 8b) and in losses to the white uppermost paint (fig. 8c). There is also a small circular patch of blue on the canvas verso (fig. 8d), where paint has seeped through a compass hole in the central circle at the top of *Les Yeux chauds*. Analysis of the paint and comparison with the historic swatches of Ripolin paint at The Art Institute of Chicago suggest that this paint is Ripolin *Bleu azur pâle* (61) or *Bleu turquoise clair* (71). At the border of the ball in *La Feuille de vigne*, there is a tiny loss that reveals bright pink underpaint (fig. 8e). The X-ray reveals that this is part of the hand in *Les Yeux chauds*. Photos © Tate, London 2016

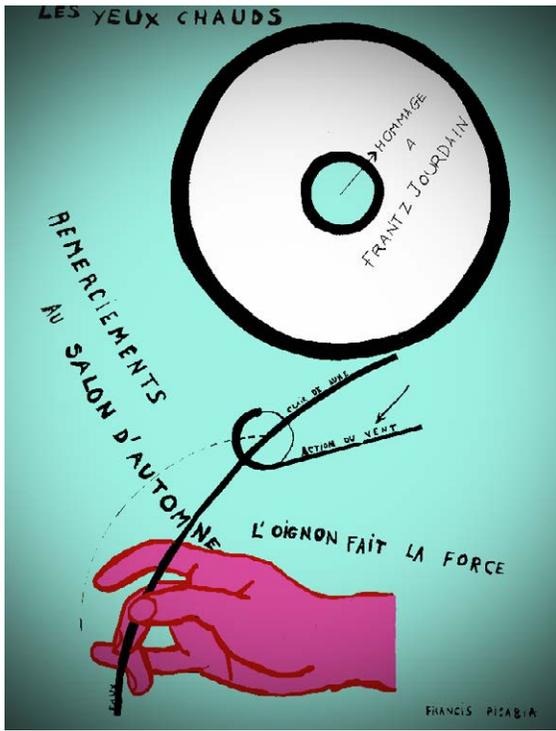


fig. 9



fig. 10a



fig. 10b



fig. 10c



fig. 10d



fig. 10e

fig. 9. Color reconstruction diagram of *Les Yeux chauds*. The only recorded image of *Les Yeux chauds* is a contemporary black-and-white photograph preserved in an album of photographs and press clippings made by Olga Mohler. Close examination of the glimpses of earlier color in the surface of *La Feuille de vigne* suggests that *Les Yeux chauds* was in fact painted with bright, complementary colors, as indicated in this color reconstruction. Subsequent microscopic examination has revealed a possible bright-red border of the hand, which indicates a more vibrant palette than originally envisioned. It is possible that some of the inscriptions may also have been brightly colored; however, this cannot be detected from the surface. Photo © Tate, London 2016

fig. 10a–e. *La Feuille de vigne* (details). Inscriptions under magnification showing the paint layer structure. After painting the black areas and then a white background up to the borders, Picabia added the letters on top of the first white layer and the red “C” up to and around the outline of the heel (figs. 10a, 10b). A magnified detail of the “C” was painted over the first white layer and up to the black edge of the heel (fig. 10c). Picabia added two more layers of white paint around the letters, as can be seen at the top corner of the letter “F” of “FEUILLE” at the top of the painting (fig. 10d). This detail reveals the three layers of white paint: one beneath the letter, one up to and around the letter, and a final layer painted up to the borders again, but not entirely covering them. The signature was moved from the lower right corner of the painting to the lower center, and these letters were painted wet-on-wet over the first white paint layer, creating a marbled effect next to the “N” in “FRANCIS” (fig. 10e). Photo © Tate, London 2016



fig. 11



fig. 12

fig. 11. *La Nuit espagnole* (*The Spanish Night*). 1922. Enamel paint and oil on canvas, 63 × 51<sup>3</sup>/<sub>16</sub>" (160 × 130 cm). Museum Ludwig, Cologne. Ludwig Collection. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo © Rheinisches Bildarchiv Köln

fig. 12. *Dresseur d'animaux* (*Animal Trainer*). 1923. Enamel paint on canvas, 8' 2<sup>7</sup>/<sub>16</sub>" × 6' 6<sup>3</sup>/<sub>4</sub>" (250 × 200 cm). Centre Pompidou, Musée national d'art moderne – Centre de création industrielle, Paris. Purchase from a public sale, 1998. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo © Centre Pompidou, MNAM-CCI/Georges Meguerditchian/Dist. RMN–Grand Palais/Art Resource, New York

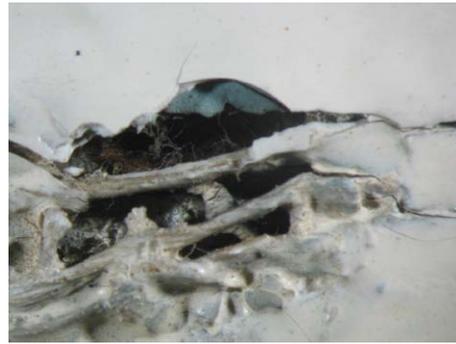


fig. 13a



fig. 13b



fig. 13c

figs. 13a–c. *La Feuille de vigne* (details). Surface viewed under magnification. At some point, *La Feuille de vigne* suffered physical damage, as evidenced by tears in the canvas and losses to the paint layers (figs. 13a, 13b). This damage apparently prompted the application of another layer of white paint over the entire background, up to and around the figures and letters. As a result, the open tears were filled with this white paint and the canvas adhered to the exposed areas of the stretcher bars. All layers of white were analyzed and compared with Ripolin samples from The Art Institute of Chicago, and the upper layer was consistent with Ripolin *Express blanc* (1001), an oil-modified alkyd resin medium containing titanium white pigment. The earlier white layers were consistent with Ripolin *Blanc de neige* (1), an oil paint with zinc oxide and metallic drier. Analysis indicates that at every stage of painting *La Feuille de vigne*, Picabia used Ripolin gloss paint; however, it is likely that the uppermost layer was applied at a much later date, possibly after the Second World War. The oil-modified alkyd resin media and titanium-based pigments identified in this paint layer were not in commercial use until the middle of the 20th century. The canvas (fig. 13c) and the multiple paint layers are extremely brittle and fragile, and risk further deterioration if subjected to excessive handling and transport.

***Promenade des Anglais (Midi)***

Frauke V. Josenhans, The Horace W. Goldsmith Assistant Curator of Modern and Contemporary Art, Yale University Art Gallery; Cynthia Schwarz, Associate Conservator of Paintings, Yale University Art Gallery; and Anikó Bezur, Wallace W. Wilson Director of Scientific Research, Technical Studies Laboratory, Institute for the Preservation of Cultural Heritage

**MOMA**



**fig. 1.** *Promenade des Anglais (Midi)*. c. 1924–25. Oil, enamel paint, feathers, pasta, and leather on canvas, in an original snakeskin frame by Pierre Legrain, 21 <sup>3</sup>/<sub>4</sub> × 39 <sup>1</sup>/<sub>4</sub>" (55.25 × 99.7 cm) unframed; 30 × 52 <sup>1</sup>/<sub>2</sub> × 6" (76.2 × 133.4 × 15.2 cm) with frame. Yale University Art Gallery. Gift of Collection Société Anonyme

In *Promenade des Anglais (Midi)* (fig. 1), whose subject is Nice's famous beachfront walkway, Francis Picabia mixed nontraditional painting methods with collaged materials chosen from everyday life.<sup>1</sup> One can imagine Picabia collecting pasta from the pantry, plucking feathers from Gabrielle Buffet's or Germaine Everling's chapeau, and snipping up leather hair curlers, then embedding these materials in the sticky enamel paint—ornamenting and transforming an ordinary painted landscape into a collage masterpiece.<sup>2</sup> With its highly textured terrain and louvered, python-finished frame, made by the French Art Deco designer Pierre Legrain, *Promenade des Anglais (Midi)* has a rare sculptural presence among Picabia's collage works. Another collage, *Plumes (Feathers)* (c. 1924–25) (fig. 2), also depicts a landscape, albeit an imaginary one, using pasta, feathers, sticks, and bandages in a Legrain frame with a deep profile. A still-life collage, *Peinture (Pot de fleurs) (Painting [Flower Pot])* (fig. 3), even includes used brushes, wooden stretcher wedges, and Ripolin paint-can lids—studio materials that Picabia used in his work and then creatively recycled.

*Promenade des Anglais (Midi)* is made on a commercially prepared artist canvas attached to a stretcher that bears labels from its history of exhibition and travel (fig. 4), including an early label from Lucien Lefebvre-Foinet, a Paris artist supplier and Marcel Duchamp's preferred shipper. Picabia applied his paint in bold swaths of color, separated by compositional lines left in reserve, which reveal the commercially applied ground.<sup>3</sup> These borders of reserve are apparent in the X-ray image (fig. 5). An infrared image (fig. 6) did not reveal any evidence of underdrawing in the composition, indicating that the artist painted the work freehand. It did, however, reveal an inscription perpendicular to the painting's orientation along the rightmost tree. In the areas where colors are mixed, the paint is blended wet-in-wet directly on the canvas. The wrinkled texture seen in the yellow and blue paint and the lack of visible brushwork are both typical of Ripolin commercial paints.<sup>4</sup> This identification based on surface quality is supported by scientific analysis and historical evidence that Picabia used this brand of enamel paint.<sup>5</sup> Drips of fluid paint extend down all four sides of the canvas, indicating that the paint was applied to the canvas while it was flat. Once the paint had started to dry, it was turned upright and the paint sagged under the skin of set paint, resulting in drips and the characteristic wrinkled drying pattern in the yellow promenade (fig. 7). This surface topography, typical of thick applications of enamel paint, is also evident in earlier paintings by Picabia.<sup>6</sup> After the paint was applied, and while it was still wet, Picabia pressed the collaged elements into the surface, using the paint

as the adhesive. Halos around the feathers indicate that the paint was partly absorbed into them (fig. 8). Analysis of pigments and organic components, and comparison with reference data on Ripolin paints, suggests that Picabia chose *Blanc de neige (1)*, *Jaune foncé (14)*, and *Bleu azur foncé (17)* to execute the white, ocher or orange, and medium blue areas. Among Ripolin paint formulations, there is not an exact match for the deep blue paint used to depict the water. However, it is plausible that the artist mixed *Blanc de neige (1)* and *Bleu outremer (13)* to achieve the desired hue.<sup>7</sup>

The earliest documented conservation evaluation of the painting dates to 1979, although there is evidence of at least one previous treatment, when the frame required adjusting and a canvas tear was mended.<sup>8</sup> From 1984 through 1988, the painting and frame underwent extensive treatment for missing and broken collage elements and damage to the frame due to severe warping of the snakeskin layer.<sup>9</sup> Many of the collaged elements were replaced at that time, not without considerable effort, as the conservator noted: "We FINALLY found the right size macaroni...Also have the greatest collection of store bought green feathers." After attempts to use "[snake] skins from the local nature center," the damaged skin on one frame panel was replaced with imitation snakeskin made from synthetic material.<sup>10</sup> Subsequent treatments involved constructing simulated pasta from archival materials, and the reapplication of a closely matching python skin to replace the synthetic copy created in the 1980s.

*Promenade des Anglais (Midi)* is a mixed media interpretation of an iconic motif that had become popular with tourists and artists alike and was widely disseminated through modern paintings and postcards. True to form, however, Picabia completely obverted his well-known subject's content and meaning. This painting-cum-collage contradicts all attempts at characterization, with the discrepancy between the use of "cheap" materials, such as pasta, and the expensive snakeskin frame made by Legrain. There is a comparable clash between the illusion of depth achieved through traditional pictorial means—the lines narrowing toward the back of the picture plane—and depth realized literally. The collage motifs protrude from the flat surface of the canvas and the panels of the frame suggest the open shutters of a window with an ersatz and picturesque view of the Côte d'Azur.

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1. The painting was shown in the first Société Anonyme exhibition at the Brooklyn Museum in 1926–27. It remained in the possession of the Société Anonyme until the artist gifted it to the collection, through Marcel Duchamp, in 1937.

2. See also Schwarz and Josenhans's "Francis Picabia's *Promenade des Anglais (Midi)*: A Landscape Painted with Pasta and Feathers" (Paper presented at the symposium Picasso, Picabia, Ernst, Tate Britain, November 25, 2016). The essay will be published in the forthcoming volume *Picasso, Picabia, Ernst: New Perspectives*, ed. Annette King, Joyce H. Townsend, and Adele Wright (London: Archetype Publishing, 2017).

3. Paul B. Franklin, ed., *The Artist and His Critic Stripped Bare: The Correspondence of Marcel Duchamp and Robert Lebel*, bilingual edition (Los Angeles: Getty Research Institute, 2016), 259n99. The ground contains a mixture of lead white and calcium carbonate (as calcite) in a drying oil-binding medium.

4. A similar visual effect can be achieved with other brands of commercial non-artist's paints, or artist oils that have been modified to achieve a fluid consistency and have a volatile component that causes some drying by evaporation. The addition of driers (siccatives) also causes the surface to dry faster and can lead to the formation of wrinkles. See Manfred Hess, Herman R. Hamburg, and W. M. Morgans, ed., *Hess's Paint Film Defects, Their Causes and Cure* (London: Chapman and Hall Ltd., 1979), 82.

5. For further information about the scientific analysis of the work, see Anikó Bezur, Unpublished scientific analysis report for Francis Picabia's *Promenade des Anglais (Midi)* (c. 1924–25), Technical Studies Laboratory, Institute for the Preservation of Cultural Heritage (2016). For historical evidence that Picabia used Ripolin paint, see Kimberley Muir, Gwénaëlle Gautier, Francesca Casadio, and Anna Vila, "Interdisciplinary Investigation of Early House Paints: Picasso, Picabia, and their 'Ripolin' Paintings" (Paper presented at the ICOM Committee for Conservation, 16th Triennial Meeting, September 19–23, 2011). For further discussion of Picabia's use of enamel paints and Picasso's use of similar materials, see Marilyn McCully, "Picasso and Ripolin," in *Picasso Express* (Antibes: Musée Picasso, 2011), 130–133.

6. For further discussion of the characteristics of Ripolin, see the essay on *La Feuille de vigne*, 29–36, in the present volume. For additional reading, see Annette King, et al., "The Use of Ripolin by Picabia in *The Fig Leaf* (1922)," *Journal of the American Institute for Conservation* 52, no. 4 (2013): 246–257.

7. Ripolin paint pigment components are detailed by Gwénaëlle Gautier, Anikó Bezur, Francesca Casadio, and Inge Fiedler in "Chemical Fingerprinting of Ready-Mixed House Paints of Relevance to Artistic Production in the First Half of the Twentieth Century," *Applied Spectroscopy* 63, no. 6 (2009): 597–603. Organic components of Ripolin paints are discussed by Maria Kokkori, Ken Sutherland, Jaap Boon, Francesca Casadio, and Marc Vermuelen in "Synergistic Use of Py-THM-GCMS, DTMS, and ESI-MS for the Characterization of the Organic Fraction of Modern Enamel Paints," *Heritage Science* 3, no. 1 (2015): 1–14. Analysis of *Promenade des Anglais (Midi)* was performed using X-ray fluorescence spectroscopy, Fourier-transform infrared and Raman spectroscopy. The white paint contains drying oil, zinc oxide white, and metal carboxylates (likely zinc and cobalt salts). The orange or ocher paint contains lead chromate in a drying oil and natural resin binding medium. The medium blue paint has a mixture of zinc oxide white and Prussian blue in binding medium consisting of drying oil and natural resin. The dark blue paint contains zinc white and ultramarine blue in a binding medium containing drying oil and natural resins.

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8. Of note is that Marcel Duchamp treated *Plumes* (fig. 2), a related collage, writing to the potential buyer: "Macaroni repaired is ready for Thursday..." Duchamp indicated that he would not sell similar works by Picabia without proper conservation. See Mark B. Pohlad, "Macaroni repaired is ready for Thursday..." Marcel Duchamp as Conservator," *Tout-Fait* 1, no. 3 (December 2000). Accessed online: [http://www.toutfait.com/issues/issue\\_3/Articles/pohlad/pohlad.html#N\\_10](http://www.toutfait.com/issues/issue_3/Articles/pohlad/pohlad.html#N_10).

9. Jean Volkmer, Unpublished condition and treatment report on Francis Picabia's *Promenade des Anglais (Midi)* (c. 1924–25), Department of Conservation, Yale University Art Gallery (1988).

10. Ibid.



fig. 1



fig. 2

fig. 1. *Promenade des Anglais (Midi)*. c. 1924–25. Oil, enamel paint, feathers, pasta, and leather on canvas, in an original snakeskin frame by Pierre Legrain, 21 <sup>3</sup>/<sub>4</sub> × 39 <sup>1</sup>/<sub>4</sub>" (55.25 × 99.7 cm) unframed; 30 × 52 <sup>1</sup>/<sub>2</sub> × 6" (76.2 × 133.4 × 15.2 cm) with frame. Yale University Art Gallery. Gift of Collection Société Anonyme. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo courtesy Yale University Art Gallery

fig. 2. *Plumes (Feathers)*. c. 1924–25. Oil, enamel paint, feathers, pasta, reeds, sticks, and circular bandages on canvas, in a frame by Pierre Legrain, 46 <sup>7</sup>/<sub>8</sub> × 31 × 6 <sup>7</sup>/<sub>8</sub>" (119 × 78.7 × 17.5 cm) with frame. Staatsgalerie Stuttgart. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo © Staatsgalerie Stuttgart



fig. 3

fig. 3. *Peinture (Pot de fleurs)* (*Painting [Flowerpot]*). c. 1924–25. Enamel paint, Ripolin paint-can lids, brushes, wooden stretcher wedges, string, and quill toothpicks on canvas, 25 <sup>9</sup>/<sub>16</sub> × 22 <sup>1</sup>/<sub>16</sub>" (65 × 56 cm). Private collection. Courtesy Galerie Gmurzynska. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo: Serge Hasenböhler Fotografie



fig. 4

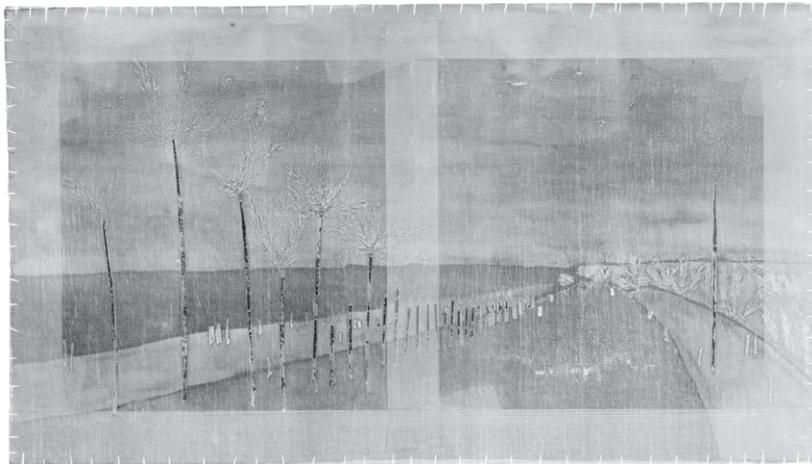


fig. 5



fig. 6

fig. 4. *Promenade des Anglais (Midi)* (verso). The back of the stretcher bears the painting's title in Picabia's hand, as well as stamps from Paris customs and Lucien Lefebvre-Foinet, probably hired to ship the painting. Photo: Cynthia Schwarz, Yale University Art Gallery, 2016

fig. 5. *Promenade des Anglais (Midi)*. Digital X-ray image. The X-ray of the painting shows that the image was executed confidently, without changes to the composition. Borders left in reserve are visible as dark lines at the horizon and flanking the white passages. Also visible are losses along the palm trunks, where pasta became detached at some point, taking paint with it, as well as metal wire in the middle of the cut pieces of sewn leather hair curlers. Photo: Eric Stegmaier, Yale Center for British Art, 2016

fig. 6. *Promenade des Anglais (Midi)*. Reflected infrared digital image. The infrared image does not show any signs of underdrawing by the artist, but an inscription, painted over by the opaque paint and no longer visible under normal light, can be detected on the right side of the image to the right of the tall palm tree. The partly obscured inscription is not legible, though the last few letters appear to be the end of the artist's signature. Photo: Richard House, Yale University Art Gallery, 2016



fig. 7



fig. 8

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**fig. 7.** *Promenade des Anglais (Midi)* (detail). Image in raking light showing the wrinkled surface of the fluid enamel paint used to depict the promenade. Photo: Cynthia Schwarz, Yale University Art Gallery, 2016

**fig. 8.** *Promenade des Anglais (Midi)* (detail). Rhea feathers, representing palm fronds, were pressed into the fluid paint while it was still wet. The absorbent feathers drew the paint inward, leaving a halo of exposed ground around them and creating a shadow effect. Photo: Cynthia Schwarz, Yale University Art Gallery, 2016



fig. 1. *Les Amoureux (Après la pluie)* (*The Lovers (After the Rain)*). 1925.  
Enamel paint and oil on canvas, 45<sup>11</sup>/<sub>16</sub> × 45<sup>1</sup>/<sub>4</sub>" (116 × 115 cm). Musée  
d'Art moderne de la Ville de Paris

Francis Picabia's use of multilayered compositions reached new heights in his so-called Monsters series. In some cases, the artist radically transformed earlier compositions, allowing only small glimpses of the underlying paintings. To create these deliberate transformations, Picabia liberally applied layers of Ripolin house paint (a particular brand of enamel paint that he favored) from a can to large swaths of his compositions. Picabia's act of overpainting prior works has at least one well-documented precedent: in 1922, Picabia obscured an earlier, diagrammatic composition with Ripolin and renamed it *La Feuille de vigne* (*The Fig Leaf*).<sup>1</sup> Overpainting to partially or completely obliterate earlier compositions, itself a Dada method, was a technique that Picabia would continue to employ throughout his career.

The spectacular Monster painting *Les Amoureux (Après la pluie)* (*The Lovers [After the Rain]*) (fig. 1) depicts an embracing couple in a shiny, colorful enamel palette including pink, white, and mustard ocher with highlights of green and red. The discovery of an earlier landscape painting from c. 1911–12 underneath *Les Amoureux* puts it in the category of works that Picabia completely repainted. The evocative “la pluie” in the parenthetical title of *Les Amoureux* may refer to the original landscape. Clues to this underlying composition can be seen along the edges of the canvas, where glimpses of earth red and yellow ocher are visible (fig. 2). Apparently, Picabia didn't even bother to unframe the landscape before repainting it! It seems, instead, that he varnished the surface before setting out to completely transform the hapless landscape with enamel paint.

Conservation imaging techniques recently allowed researchers in Paris, at the Centre de recherche et de restauration des musées de France (C2RMF), to document each stage of the painting's creation. The underlying earlier composition was eventually identified as the landscape oil painting *Grimaldi après la pluie* (*Grimaldi after the Rain*) (fig. 3), which was long thought to be lost.<sup>2</sup> The X-ray image (fig. 4) confirmed this identification. Because Picabia used dense oil pigments in the original painting, including lead white, that underlying composition is especially visible. Scientific analysis also indicated that the palette of this early work included dark blue and chrome green pigments, in addition to red, now visible only around the perimeter of the painting in small glimpses.<sup>3</sup>

At some undetermined point, *Les Amoureux* was documented in a state in which it had a different background. The similarities between this historic photograph of the painting and the reflected infrared

image are striking (figs. 5, 6). In this intermediate stage, the background was decorated with wavy paint strokes and a flowery pattern. Picabia ultimately simplified the composition by layering blue and black enamel paint over most of the background, framing the couple with an inky dark border. The only part of the intermediate stage still visible is the floral section at the lower right edge (fig. 7).

Ultraviolet visible fluorescence (fig. 8) indicates that the entire painting was ultimately varnished to further emphasize the glossy enamel surface. Perhaps Picabia intended to evoke the setting of a slick sidewalk on a rainy night on the Côte d'Azur?

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1. For further discussion of this work, see the essay on *La Feuille de vigne*, 29–36, in the present volume. For additional reading, see Annette King, et al., “The Use of Ripolin by Picabia in *The Fig Leaf* (1922),” *Journal of the American Institute for Conservation* 52, no. 4 (2013), 246–257.

2. William A. Camfield, et al., *Francis Picabia: Catalogue Raisonné, vol. I, 1898–1914* (Brussels: Mercatorfonds, 2014), 327.

3. Hélène Lassalle, Elsa Lambert, and Eric Laval, Unpublished report on *Les Amoureux (Après la pluie)*, Centre de recherche et de restauration des musées de France (C2RMF) (June 28, 2005), 3–4.



fig. 1

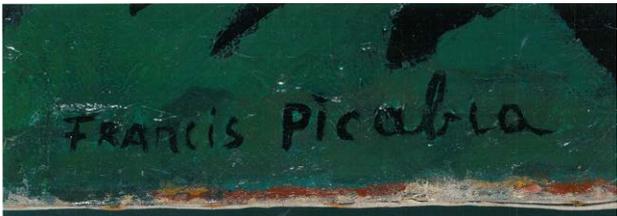


fig. 2

**Fig. 1.** *Les Amoureux (Après la pluie) (The Lovers [After the Rain])*. 1925. Enamel paint and oil on canvas, 45<sup>11/16</sup> × 45<sup>1/4</sup>" (116 × 115 cm). Musée d'Art moderne de la Ville de Paris. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo: Musée d'Art moderne de la Ville de Paris/Roger-Viollet

**Fig 2.** *Les Amoureux (Après la pluie) (detail)*. Painting edge showing glimpses of the underlying composition that would normally be covered by the frame. Photo: Elsa Lambert, Centre de recherche et de restauration des musées de France (C2RMF), 2005



fig. 3



fig. 4

**Fig 3.** *Grimaldi après la pluie (Grimaldi after the Rain)*. c. 1911–12. Picabia painted *Les Amoureux (Après la pluie)* over this work. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo courtesy Archives Comité Picabia

**Fig 4.** *Les Amoureux (Après la pluie)*. X-ray showing correspondence with *Grimaldi après la pluie*. Photo: Elsa Lambert, Centre de recherche et de restauration des musées de France (C2RMF), 2005



fig. 5

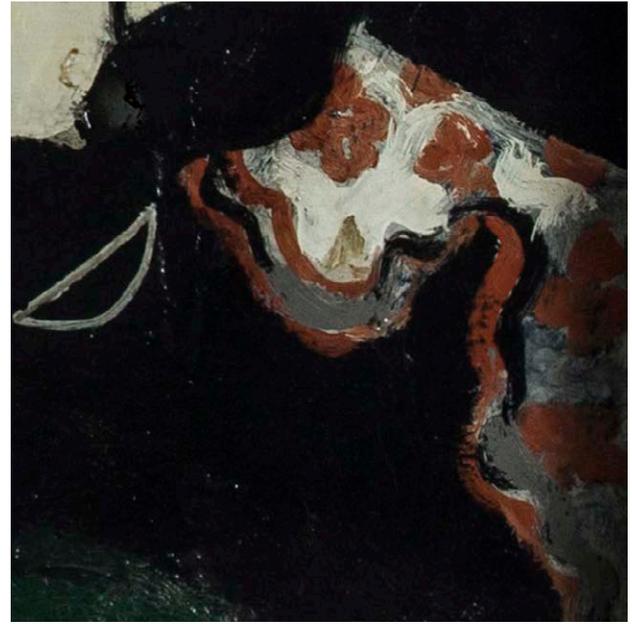


fig. 7



fig. 6



fig. 8

**Fig. 5.** *Les Amoureux (Après la pluie)*. Archival photograph showing an intermediate stage with a decorative background. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo courtesy Archives Comité Picabia and Mercatorfonds

**Fig. 6.** *Les Amoureux (Après la pluie)*. Reflected infrared digital photograph. In this image, the pattern of the background in its intermediate stage is evident. Photo: Elsa Lambert, Centre de recherche et de restauration des musées de France (C2RMF), 2005

**Fig. 7.** *Les Amoureux (Après la pluie)* (detail). Painting edge at lower right of the composition. Photo: Musée d'Art moderne de la Ville de Paris/Roger-Viollet

**Fig. 8.** *Les Amoureux (Après la pluie)*. Ultraviolet visible fluorescence indicates that a natural resin was applied to the composition overall. Photo: Elsa Lambert, Centre de recherche et de restauration des musées de France (C2RMF), 2005



fig. 1. Aello. 1930. Oil on canvas, 66 $\frac{9}{16}$  × 66 $\frac{9}{16}$ " (169 × 169 cm).  
Private collection

*Aello* (fig. 1) is one of a series of Transparencies that Francis Picabia produced in his studio at the Château de Mai, in Mougins (fig. 2). The titles of these works, including *Aello*, were frequently derived from the Latin names of moths and from Greek mythology: *Aellopus*, a hawk moth, takes its name from one of the harpies.<sup>1</sup> Picabia's use of multilayered compositions achieved an extraordinary level of sophistication in the Transparencies, which were created using several applications of oil paint, along with varied techniques including rubbing, blotting, erasing, repainting, and the deliberate manipulation of oil paint in thin washes embedded in layers of varnish. Fellow artist Sir Francis Rose noted that Picabia "painted entirely in glazes of transparent colors which he mixed with a special varnish which, although permanent and non-cracking, turned a yellow color and blued in the cold."<sup>2</sup> The results were newly complex pictorial surfaces.

Two monumental heads, derived from the wreathed angels in Piero della Francesca's *Baptism of Christ* (fig. 3), dominate the composition of *Aello*. The painting's nominally biblical subject complements the classical and mythological themes that occur frequently in the Transparencies. With its large heads compressed in space and laid over a landscape setting, *Aello* also recalls the compositions of *Melibée* (fig. 4) and *Têtes-paysage (Heads-Landscape)* (fig. 5).<sup>3</sup>

In *Aello*, Picabia knit together elements from the background and foreground with a sinuous painted line that interweaves foliage and figure, melding techniques from his drawings and paintings. Indeed, similarities to watercolors and gouaches of the period (fig. 6)—including thinned washes of paint, hatched lines to denote form and texture, and a selective reinforcement of lines weaving through the composition—are evident in both drawings and oil paintings of this time.

In the composition, made with oil on a large, square, primed canvas, Picabia painted in some foreground elements first. In the process of adding layers, his initial brushwork was deliberately rubbed out and eroded, with islands of paint remaining visible underneath thin washes of pigment (fig. 7). Serpentine shapes of underlying, partially erased forms recall *Sphinx* (fig. 8), in contrast with *Melibée* and *Têtes-Paysage*, in which elements of the landscape are more discernible. Washes of Prussian blue paint were used to fill in the upper background, with the twisted form of an oak tree anchoring the middle ground of the composition. The oak leaves wreathing the heads are painted with fluid brushwork, with highlights in transparent green and earth pigments. Scumbling of

opaque paint was also used by Picabia to define shapes locally. The artist ultimately rendered the facial features of the heads in outlines of black paint delineated with a brush and selectively reinforced—particularly in the contours of the heads, necks, and shoulders—with a rich red earth paint that is also evident in *Melibée*. Lastly, Picabia highlighted the figures' eyes (fig. 9) with bright transparent-white paint, probably zinc white, over a pale blue wash as the final touches on the canvas.

Using a limited palette (earth colors, Prussian blue, transparent green, black, and white) and layers of natural resin varnish to build the pictorial layers, Picabia achieved a multilayered, glossy surface with a craquelure, much like glazed ceramic. The craquelure is enhanced to exaggerated effect in some Transparencies, like *Sittelle* (fig. 10). This limited palette is also evident in other works, like *Sphinx* and *Melibée*. The palette selection is reminiscent of red- and black-figure vases in ancient Greece (fig. 11) or *sinopia* (red earth) drawings (fig. 12), in which the rich terracotta color and black predominate.<sup>4</sup>

In other examples from the series, including *Minos* (fig. 13), Picabia used what might be mahogany wood panels, allowing the natural, warm-brown color of the unprimed support to show through the paint layers and suffuse the composition. Aspects of the linear black paints also evoke Greek figure painting, as do the classical motifs deployed throughout the Transparencies (and in titles like *Minos*, referring to the infamous king of Crete who was the son of Zeus and Europa).

Picabia's facility with the drawn and painted line is evident in *Aello* as well. It appears that Picabia did not typically rely on preparatory drawings for such ambitious compositions. Instead, he developed them using a system of layering, controlled erasing, and repainting, with the source material—in this case, Piero's *Baptism of Christ*—in mind.<sup>5</sup> Whether Picabia may have relied on other techniques to aid in copying that source is an open question. It is possible that he used strategies such as tracing or projecting, but there is no documentation of his specific working methods. Also, there is no physical evidence visible [on the painting, such as an underlying pencil grid, to suggest the use of traditional enlarging techniques. In the absence of tangible proof, it seems reasonable to conclude that Picabia had the facility to copy his source material freehand—and that his academic training served him well in this case!

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1. William A. Camfield, *Francis Picabia: His Art, Life, and Times* (Princeton: Princeton University Press, 1979), 240. For a discussion of the derivation of Picabia's titles, see also Arnaud Pierre, *Francis Picabia: La Peinture sans aura* (Paris: Éditions Gallimard, 2002), 234.

2. Sir Francis Rose, quoted in Sarah Wilson, *Francis Picabia: Accommodations of Desire* (New York: Kent Fine Art Inc., 1989), 19.

3. Camfield, 240.

4. For additional discussion of the relationship between Picabia's Transparencies and works from classical antiquity, see Christopher Green and Jens M. Dahner, ed., *Modern Antiquity: Picasso, De Chirico, Léger, Picabia* (Los Angeles: The J. Paul Getty Museum, 2011).

5. Picabia was known to base his compositions on reproductions in art books that he consulted and referenced, including a book on Catalan murals and a field guide to butterflies and moths. Some of these books are held in the archives of the Comité Picabia, in Paris. Thanks to Beverley Calté for generously sharing these materials.



fig. 1



fig. 2



fig. 3

fig. 1. *Aello*. 1930. Oil on canvas, 66<sup>9</sup>/<sub>16</sub> × 66<sup>9</sup>/<sub>16</sub>" (169 × 169 cm). Private collection. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo courtesy the owner

fig. 2. Picabia in his studio at the Château de Mai, Mougins, 1929, with *Villica-raja* (1929) on the easel. Photo courtesy Archives Comité Picabia



fig. 4



fig. 5

fig. 3. Piero della Francesca. *The Baptism of Christ*. 1450s. Egg tempera on poplar, 65<sup>3</sup>/<sub>4</sub> × 45<sup>13</sup>/<sub>16</sub>" (167 × 116 cm). National Gallery, London. Purchased 1861. Photo © National Gallery, London/Art Resource, NY

fig. 4. *Mélibée*. 1930. Oil on canvas, 76<sup>15</sup>/<sub>16</sub> × 51<sup>3</sup>/<sub>16</sub>" (195.5 × 130 cm). Marianne and Pierre Nahon; Galerie Beaubourg, Paris. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo: Suzanne Nagy

fig. 5. *Têtes-paysage (Heads-landscape)*. 1928. Oil on canvas, 23<sup>3</sup>/<sub>4</sub> × 32" (60.3 × 81.2 cm). The Art Institute of Chicago. Gift of Mary and Leigh Block, 1966. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo courtesy The Art Institute of Chicago



fig. 6



fig. 8



fig. 7



fig. 9

**fig. 6.** Untitled (*Espagnole et agneau de l'apocalypse* [*Spanish Woman and Lamb of the Apocalypse*]). 1927/28. Watercolor, gouache, ink, and pencil on paper, 25<sup>3</sup>/<sub>16</sub> × 19<sup>1</sup>/<sub>16</sub>" (65 × 50 cm). Private collection. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo: Stephan Wyckoff

**fig. 7.** *Aello* (detail). The rubbed surface of the composition. Photo courtesy the owner

**fig. 8.** *Sphinx*. 1929. Oil on canvas, 51<sup>9</sup>/<sub>16</sub> × 64<sup>3</sup>/<sub>16</sub>" (131 × 163 cm). Centre Pompidou, Musée national d'art moderne – Centre de création industrielle, Paris. Purchase, 1933, by the State at the Musée du Jeu de Paume on October 15, 1933. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo © Centre Pompidou, MNAM-CCI/Bertrand Prévost/Dist. RMN–Grand Palais/Art Resource, New York

**fig. 9.** *Aello* (detail). The eyes of the figures. Photo courtesy the owner

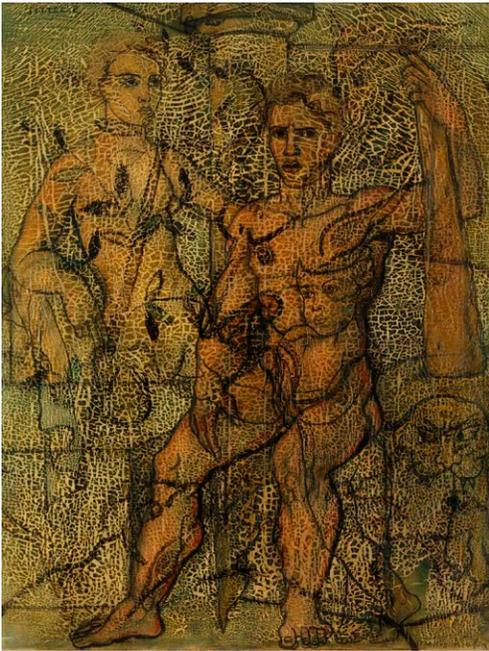


fig. 10



fig. 12



fig. 11



fig. 13

fig. 10. *Sittelle*. c. 1931. Oil and charcoal on canvas, 45<sup>11/16</sup> × 35<sup>11/16</sup>" (116 × 89 cm). Louisiana Museum of Modern Art, Humblebæk, Denmark. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo courtesy the Louisiana Museum of Modern Art

fig. 11. The AD Painter. Hydria depicting Dionysus. 500 B.C. Height: 16<sup>1/2</sup>" (41.91 cm). The British Museum. Purchased from Lucien Bonaparte, Prince of Canino and Musignano, 1837. Photo courtesy The British Museum

fig. 12. Andrea del Castagno. Sinopia of the Annunziata Trinity. Sant'Apollonia, Florence. Photo courtesy Scala/Art Resource, NY

fig. 13. *Minos*. 1929. Oil, watercolor, and pencil on wood, 59 × 37<sup>13/16</sup>" (149.9 × 96 cm). Gian Enzo Sperone. Courtesy Sperone Westwater, New York. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo courtesy Sperone Westwater

**Portrait d'un docteur**

Annette King, Paintings Conservator, Modern and Contemporary Art, Joyce H. Townsend, Senior Conservation Scientist, and Bronwyn Ormsby, Principal Conservation Scientist, Tate

**MOMA**



fig. 1. *Portrait d'un docteur* (*Portrait of a Doctor*). 1935/c. 1938. Oil on canvas, 36 $\frac{1}{4}$  × 28 $\frac{1}{16}$ " (92 × 72.8 cm). Tate. Purchase with assistance from the Friends of the Tate Gallery, 1990

*Portrait d'un docteur (Portrait of a Doctor)* (fig. 1) was painted in two campaigns separated by a number of years. Initially conceived as a portrait of Dr. Gaston Raulot-Lapointe (1879–1946), a close friend of the artist's, the first version is thought to have been painted in 1935 (fig. 2).<sup>1</sup> A photograph of the painting in the studio at the Château de Mai (fig. 3), Francis Picabia's home in Mougins, indicates a latest possible date of summer 1935 for the first version of the painting, right before the house was sold that August. The second and final version of the composition is signed "Francis Picabia" and inscribed "1925," a deliberately inaccurate date that does not appear in photographs of the work in its original state.

In 1936, many of the paintings seen in the Château de Mai studio photograph were included in an exhibition organized with the assistance of Gertrude Stein at the Arts Club of Chicago (January 3–25). The majority of the paintings, including *Portrait d'un docteur*, were returned unsold; Picabia was bitterly disappointed that the exhibition was a critical failure. Olga Mohler, the artist's future wife, noted in her album of photographs and clippings related to Picabia's life that *Portrait d'un docteur* was "destroyed."<sup>2</sup> The painting was not, however, truly destroyed. In fact, Picabia painted over large areas of the first version of the work and completely transformed it. Although it has been generally accepted that this repainting took place in 1938 as a reaction to its rejection in Chicago, exactly why or precisely when the repainting occurred remains open to debate.<sup>3</sup> Gérard Audinet has suggested a later date for the second painting campaign, arguing that the death of Dr. Raulot-Lapointe in 1946 provoked the reworking of the canvas. For Audinet, the phallic forms relate to subjects contemporaneous with the abstractions that Picabia made in Paris following World War II.<sup>4</sup> Recent technical study has not provided conclusive evidence for a date of 1938—or any other year.

Picabia used a commercially bought canvas for *Portrait d'un docteur* (fig. 4). The canvas came prepared with glue size and an applied white ground. The painting is thought to still be on its original stretcher, made of softwood in the standard French size of "30 Figure." The reverse of the canvas bears the stamp of Lucien Lefebvre-Foinet, an artist supplier from whom Picabia had long secured materials (fig. 5).

A close examination of *Portrait d'un docteur* revealed a complex layer structure of oil paint and natural resin varnish that Picabia used in innovative ways. Pigment analysis indicates that Picabia painted the original

composition's figure and skull with lead white pigment, using bone black for the outlines and filling out the flesh areas with pale pink and a combination of lead white, vermilion, and yellow ochre. Brushstrokes in the background and shirt contain lead white covered by a layer of transparent Prussian blue applied between varnish layers. These formed the final layers of the first version. In the reflected infrared digital image (fig. 6), many of the details of the original underlying composition, including the subject's face, his shirt, and the skull, are clearly visible.

The complex paint structure of the cumulative pictorial layers is visible in a microscopic sample of pigment viewed in cross-section (fig. 7). The simple layer structure of the first version is clearly visible, including the lead white ground with a yellow imprimatura containing lead white, yellow ochre, and traces of bone black. Picabia applied a gray-blue layer over much of the background of the first painting. Other pigments detected were lead white, bone black, vermilion, and traces of cobalt blue. Two layers of natural resin varnish were applied on top of these opaque paint layers; they sandwich a thin, dark line of Prussian blue between.

Glimpses of the underlying painting can be seen on the surface in some passages of the figure's apparel (fig. 8). The translucent black outline is on top of the lead white of the shirt. The layering of varnish and pigment accentuates the translucent quality of the final surface of the composition. The yellowed varnish, combined with the blue, lends these areas an overall greenish appearance, which has intensified as the natural resin layers have yellowed considerably over time.

The final version of *Portrait d'un docteur* appears to have been rapidly executed, but it nonetheless highlights Picabia's skill at manipulating materials and experimenting with paint effects. In his overpainting campaign, Picabia painted and varnished the doctor's face in a manner that mimics the composition and simple layered structure of the greenish background color of the first version of the painting. Although the artist transformed his subject's head by overlaying the face with a triangular hourglass shape surrounded by a border of cell-like clusters and elongated shapes, an X-ray of the painting indicates that Picabia closely followed the contours of the original face as he overpainted (figs. 9, 10). Moreover, he intentionally re-created the translucent effect of the background in the spaces around the triangles, while completely obscuring all details of the original face. These effects are most apparent under ultraviolet light fluorescence (figs. 11, 12). Picabia attempted to imitate the tone

and translucency of the background in the doctor's visage by selectively applying varnish as he worked.

*Portrait d'un docteur* demonstrates Picabia's expert manipulation of varnish, as he used varnish locally to adjust the gloss of the upper paint layers, and also within the paint layers in glazes. These layers are distinguished by their differing visible fluorescence. These underlying varnishes and glaze layers exhibit a slightly green fluorescence under ultraviolet light. The uppermost varnish is applied loosely around the contours of the skull, and it is bluer in fluorescence than the underlying varnish.

Picabia left glimpses of the original painting visible in the skull (fig. 13). In the first painting campaign, this part of the composition was painted in a manner similar to the background and shirt, with thinly applied, black brushstrokes delineating the skull over a paler cream ground that was tinted with a blue glaze. This area developed the distinctive, complex crackle pattern seen in the background, a combination of drying cracks—wide, open, and amorphous—along with brittle fracture cracks that appear as thin, linear breaks in the surface. Picabia used thicker impasto when he revisited the work, particularly in the areas covering the original skull. He laid in yellow paint beneath the Prussian blue and under some of the white lines and the circular shapes. In the eye sockets, he created a marbling effect by mixing liquid blue into wet, white paint.

Scientific analysis also confirmed the painting structure of the second campaign in the flesh tones of the hand and wrist (figs. 14, 15). The hand was painted over in several layers, with each successive layer left partly visible. There is a dark orange, with a paler orange laid on wet-in-wet and blended slightly with the layer beneath, and finally a much paler orange on top. The bright orange layer contains cadmium orange mixed with lead and zinc white. On top of the orange is a layer of pure Prussian blue applied in the circular cluster design, followed by a swirl of zinc white paint. The zinc white was tinted with blue from beneath, resulting in a pale blue area.

Although the uppermost layers of paint have the distinctive look of glossy enamel paint in some areas, scientific analysis indicates that Picabia used traditional artist tube oil paints in *Portrait d'un docteur*—possibly modified with natural resin to adjust the working properties—rather than commercial enamel such as Ripolin, a material that the artist favored in his work of the 1920s.<sup>5</sup> The pale pink of the painted hand, for

example, has the look of a glossy enamel paint, but analysis indicates that the pigments are consistent with artist tube paint.

The appearance of the overall painting has shifted and changed with age. The translucent varnish and transparent blue glazes over the bright white and pale, delicate colors of the first version have become more yellow, cracked, and opaque over time. The upper, later layers have become more see-through as they have formed lead soap aggregates with smaller amounts of zinc soaps. The Prussian blue totemic symbols, in particular, have become more translucent, revealing the white shirt underneath. The layers of dried oil paint and varnish have become brittle and cracked extensively, forming the distinctive surface patterns. Lead soap aggregates have also formed in the oil layers and now protrude through the paint layers, breaking up the smooth glazed background and giving it a more speckled, transparent appearance. The photomicrographs (fig. 16) of the lead soap aggregates may give a better idea of the original blue tone of the surface of the composition.

Despite these issues, *Portrait d'un docteur* is in remarkably good condition and has required very little treatment since entering the Tate's collection in 1990. Although it has an overall greener tonality than when first painted, the work retains much of its original vibrancy and impact despite this coloristic shift as the paint layers aged. This investigation demonstrates how Picabia's mastery of layering and repainting images could result in a highly inventive and extremely potent reinterpretation of his original subject.

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Acknowledgements: Grateful thanks to the Clothworkers' Foundation, who generously supported the two-year technical study of Picasso, Picabia, and Ernst at Tate between 2014 and 2016. Warm thanks to Beverley Calté of the Comité Picabia for her invaluable help and for sharing archival materials and insights with unstinting encouragement. Thanks to Suzanne Nagy of the Comité Picabia, and to Tate Photography, particularly Marcella Leith, Mark Heathcote, Rod Tidnam, Joe Humphries, Jo Fernandes, Lucy Dawkins, and Rose Hillson-Summers, for the beautiful images they have taken and shared for this project. Thanks also to Tate Art Handling and Registrars for frequent movements and continued access to the painting. The digital X-ray equipment was acquired by Tate with support from the Cohen Foundation, and we thank Lord and Lady Ronald Cohen for this generous gift. Grateful thanks to John Delaney and Kate Dooley, from the National Gallery of Art, Washington, DC, who took the infrared images for the project. Paola Ricciardi of the Fitzwilliam Museum, Cambridge, kindly shared her infrared camera for this purpose. Some of the images were made with a HIROX KH-8700 digital microscope, the purchase of which was supported in part by the Horizon2020 funded NANORESTART project (agreement 646063). We also thank Lora Angelova, Tate, who contributed to this analysis.

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1. Dr. Gaston Raulot-Lapointe was a celebrated medical professional and an early researcher into radiation and X-rays; he retired in 1928 due to ill health. See Georges Ronneaux's obituary for Dr. Raulot-Lapointe, published in *La Presse Médicale*, no. 16 (March 15, 1947): 182.
  2. Olga Mohler [Picabia], "Sur Francis Picabia," photo album in the archives of the Comité Picabia, Paris. Published as *Album Picabia*, ed. Beverley Calté (Brussels: Mercatorfonds, 2016), n.p.
  3. For further reading on Picabia's practice of overpainting during this moment, see William A. Camfield, *Francis Picabia: His Art, Life, and Times* (Princeton: Princeton University Press, 1979), 249.
  4. Suzanne Pagé and Gérard Audinet, ed., *Francis Picabia: Singulier idéal* (Paris: Musée d'Art moderne de la Ville de Paris, 2002), 396.
  5. For further reading on Picabia's use of enamel paint, see the essay on *La Feuille de vigne*, 29–36, in the present volume. See also Annette King, et al., "The Use of Ripolin by Picabia in *The Fig Leaf* (1922)," *Journal of the American Institute for Conservation* 52, no. 4 (2013): 246–257.



fig. 1

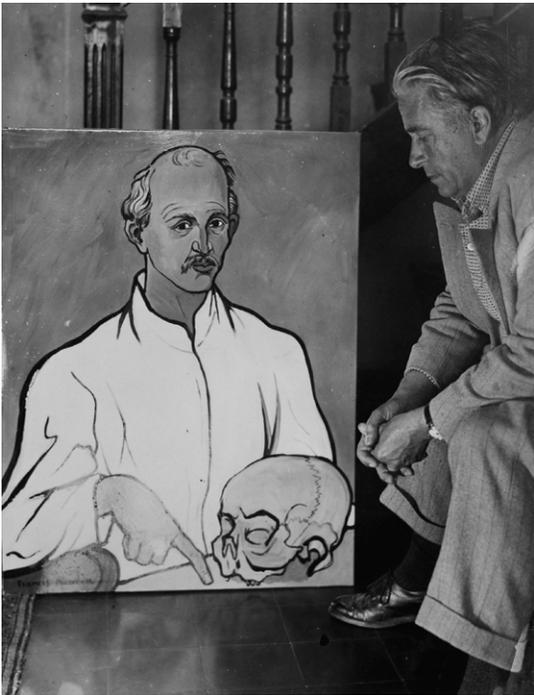


fig. 2

**Fig. 1.** *Portrait d'un docteur* (*Portrait of a Doctor*). 1935/c. 1938. Oil on canvas, 36<sup>3</sup>/<sub>4</sub> × 28<sup>1</sup>/<sub>16</sub>" (92 × 72.8 cm). Tate. Purchased with assistance from the Friends of Tate Gallery, 1990. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo © Tate, London 2016

**Fig. 2.** Picabia with *Portrait d'un docteur* (first version), summer 1935. Photo courtesy Archives Comité Picabia



fig. 3



fig. 4



fig. 5

**Fig. 3.** Picabia's studio at the Château de Mai, in Mougins, summer 1935. *Portrait d'un docteur* (first version) is leaning on top of the mantelpiece. Photo courtesy Archives Comité Picabia

**Fig. 4.** *Portrait d'un docteur* (verso). Photo © Tate, London 2016

**Fig. 5.** *Portrait d'un docteur* (detail, verso). Canvas stamp on upper center, from the artist supplier Lucien Lefebvre-Foinet. Photo © Tate, London 2016



fig. 6

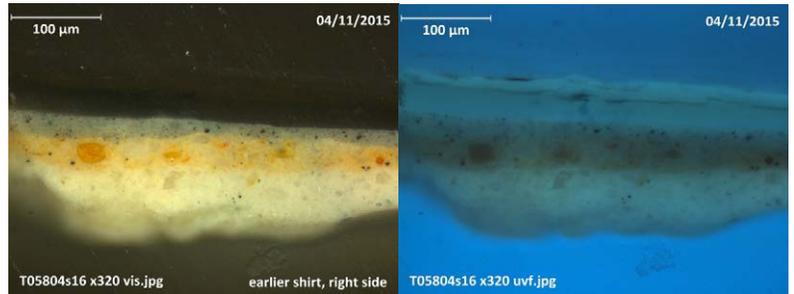


fig. 7



fig. 8

**Fig. 6.** *Portrait d'un docteur*. Reflected infrared digital image. In the infrared image, the first version of the painting is clearly visible beneath the upper layers of paint. Photo: John Delaney and Kate Dooley, National Gallery of Art, Washington, DC, 2016

**Fig. 7.** *Portrait d'un docteur*. A cross-section sample taken from the left of *Portrait d'un docteur* in the area of the shirt-sleeve, shown in visible light (left) and ultraviolet light (right), reveals varnish layers above the gray layer of paint, with a blue glaze between the varnishes.

**Fig. 8.** *Portrait d'un docteur* (details). Painting under magnification at the base of the collar (left), in the area indicated by the red rectangle (right). Photos © Tate, London 2016



fig. 9

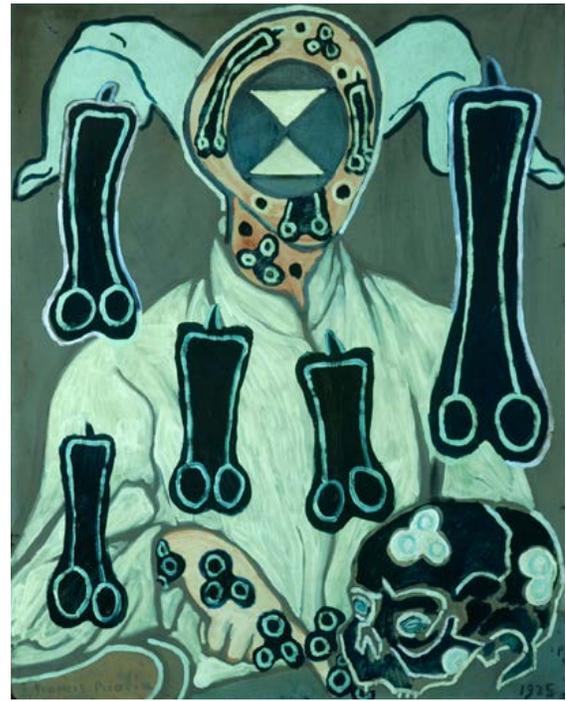


fig. 11

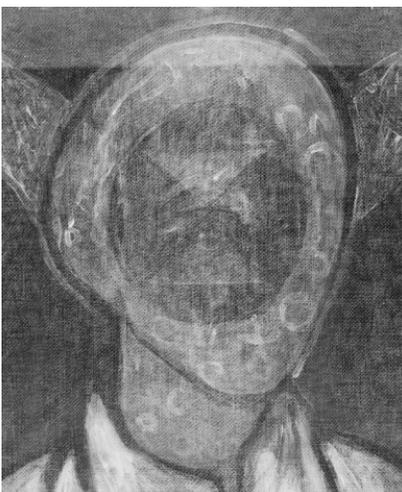


fig. 10



fig. 12

Fig. 9. *Portrait d'un docteur*. Digital X-ray image. Photo © Tate, London 2016

Fig. 10. *Portrait d'un docteur* (detail). Digital X-ray image. Photo © Tate, London 2016

Fig. 11. *Portrait d'un docteur*. Ultraviolet light fluorescence digital image. Photo © Tate, London 2016

Fig. 12. *Portrait d'un docteur* (detail). Head under ultraviolet light fluorescence. Photo © Tate, London 2016



fig. 13

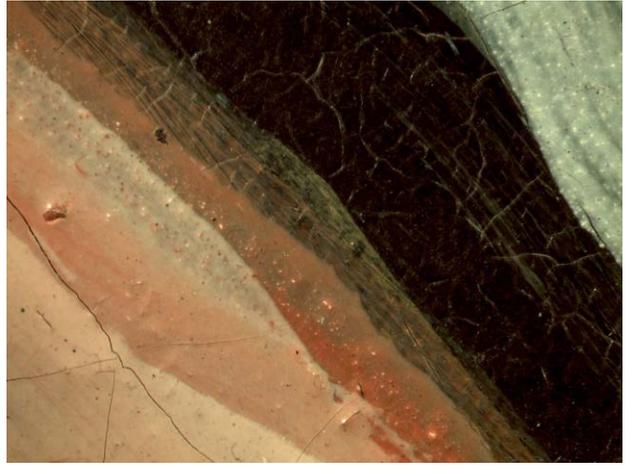


fig. 15



fig. 14

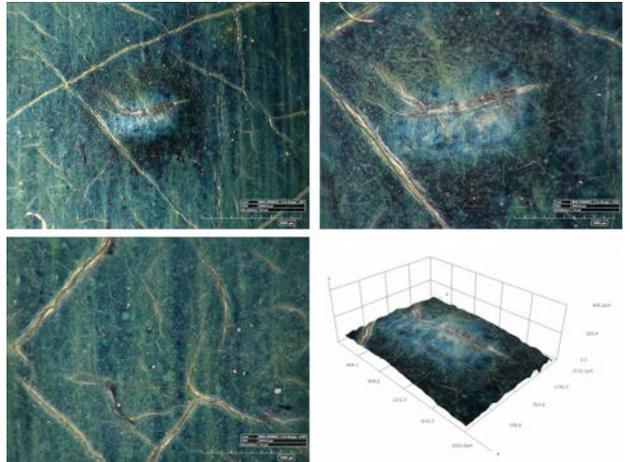


fig. 16

Fig. 13. *Portrait d'un docteur* (detail). Skull seen under raking light. Photo © Tate, London 2016

Fig. 14. *Portrait d'un docteur* (detail). Hand seen under raking light. Photo © Tate, London 2016

Fig. 15. *Portrait d'un docteur*. Photomicrograph of the paint layers in the hand. Photo © Tate, London 2016

Fig. 16. *Portrait d'un docteur*. Photomicrographs of a protruding lead soap aggregate in the background of the composition, pushing the white ground through to the surface. Photo © Tate, London 2016

**Portrait d'un couple**

Michael Duffy, Paintings Conservator,  
and Talia Kwartler, Curatorial Assistant,  
Department of Painting and Sculpture,  
The Museum of Modern Art

**MOMA**



fig. 1. *Portrait d'un couple* (*Portrait of a Couple*). 1942–43. Oil on board, 41 $\frac{5}{8}$  × 30 $\frac{1}{2}$ " (105.7 × 77.4 cm). The Museum of Modern Art, New York. Purchase, 2000

*Portrait d'un couple (Portrait of a Couple)* (fig. 1) is a characteristic example of Francis Picabia's production during World War II. At this time, he produced a large number of works based on photographic sources, particularly those found in soft-core pornography magazines. Unlike earlier Dada works that were often related to machine diagrams, this painting of a Hollywood couple combines the artifice of the so-called "pin-ups" made during this period with an idyllic outdoor setting inspired by a black-and-white photograph published in *Paris Magazine*, no. 68 (July 1937) (fig. 2). Beverley Calté, a member of the Comité Picabia, was the first to identify the *Paris Magazine* photograph, which depicts a smiling woman seated beside a cherry tree, watching while a young boy hoists a girl up into the blossoms.<sup>1</sup> Picabia copied the boy, the girl, and the tree from *Paris Magazine* for the background of *Portrait d'un couple*, but used different sources for the couple in the foreground; we recently identified the man and woman as the American actors Andrea Leeds and Joel McCrea. This Hollywood couple, as depicted by Picabia, bears a strong resemblance to press photos for the film *Youth Takes a Fling* (1938) (fig. 3). Leeds looks strikingly similar to the woman in the foreground of *Portrait d'un couple*, although McCrea's resemblance is less definitive, suggesting that Picabia referenced multiple photographs of these Hollywood stars while he worked.<sup>2</sup>

Conservation imaging under a variety of lighting conditions provides some clues as to how Picabia might have constructed these photo-based compositions, which are evocative of film montages. Using reflected infrared imaging, it is possible to discern Picabia's underdrawing in greater detail than is visible to the naked eye (fig. 4). Although Picabia loosely sketched the outlines of the tree in the background and the figures beneath it, there is no conclusive evidence that he used a pencil grid to transfer the image. Similarly, there are no traces on the painting indicating that he used a projector or pantograph to aid the transfer from photographs to painted composition, suggesting that Picabia copied the image freehand, enlarging it to fit the background. The pencil outlines, visible to the left of the tree trunk and around the left arm of the woman in the blossoms, only loosely conform to the painted image; they appear to have provided an approximate indication of the scale and forms, but were not used as a precise outline to be filled in. Picabia's proven skills as a draftsman were suppressed in this case. He could make exquisitely rendered, Ingre-esque drawings (see, in particular, the *Espagnoles* of the 1920s), in contrast to what is observed in this painting: an underdrawing that was deliberately applied in a loose and gestural

way to give texture to the painted image rather than simply defining contours to be filled in with paint. This kind of loose drawing is evident in other works from the 1940s, indicating Picabia's sustained use of this gesture. It is interesting to note that this technique, found in Picabia's complex and multilayered renderings of the earlier *Transparencies* series, is still detectable in the 1940s, when the artist was making works with increasingly opaque surfaces.

An X-ray image (fig. 5) reveals that the different elements of the painting were envisioned to fit together in a seamless composition. Picabia did not paint McCrea and Leeds over the landscape, nor is the seated woman, found at the base of the tree in the photograph published in *Paris Magazine*, detectable underneath the Hollywood pair. This suggests a carefully planned image, in which Picabia expertly transferred multiple photographic sources to the painted surface at the same time.

Viewing the painting under ultraviolet visible fluorescence (fig. 6) gives clues to the work's richly painted oil surface, which was mixed with natural resin, applied in layers, wiped, and reapplied. This fine-tuning on the paint surface, combined with the layering of the surface with varnish, demonstrates the ease with which Picabia handled and manipulated oil paint. Picabia also deftly adjusted the highlights and color of the Hollywood couple's faces, recalling the retouching that would have occurred while preparing images for publication in magazines. The faces were also extensively reworked in the cheeks and around the eyes. This was achieved by rubbing, erasing, and repainting locally. Varnish covers the signature, while other areas, including the foreground couple's face and hair, have been reworked over the varnish, indicating that Picabia finalized passages even after he signed the painting. Perhaps the final touch was the painted cherry blossom boutonnière depicted on the man's lapel, linking the smiling pair with the couple in the trees.

Although Picabia initially painted the work on board, *Portrait d'un couple* was ultimately mounted onto a wooden support, perhaps to correct distortions in the cardboard. Picabia's paint went onto the surface at the edges, suggesting that—no surprise!—he partly reworked the composition after mounting. This evidence of reworking after mounting is also detectable in other works from the 1940s, including *Le Juif errant (The Wandering Jew)* (fig. 7).

Picabia used the practice of layering to great effect in his Transparencies series of the late 1920s and early 1930s. These practices are evident in *Portrait d'un couple*, but are ultimately simplified and revised.<sup>3</sup> Multiple sources are still employed, but the sources are awkwardly spliced together, creating tense scenarios that are quite unlike the more decorative Transparencies. Even more significantly, the viewer can no longer “look through” one image and see another, as with the Transparencies. This deliberate opacity is in contrast to earlier works, but nonetheless illustrates that Picabia’s practice of layering paint with varnish continued, allowing him to work on *Portrait d'un couple* over an extended period of time. The photo-based paintings from the 1940s demonstrate the artist’s inventive use of printed materials; he masterfully juxtaposes his photographic sources, creating scenes of heightened, artificial reality. When Picabia painted this unique “portrait” of movie stars in an idyllic setting, perhaps he hoped to align himself with his silver screen subjects—an artful escape from the realities of war.

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1. Suzanne Pagé and Gérard Audinet, ed., *Francis Picabia: Singulier idéal* (Paris: Musée d'Art moderne de la Ville de Paris, 2002), 355. A sometimes-used subtitle for the work is *Le Cerisier (The Cherry Tree)*; see Arnaud Pierre, “A ‘Pop-ist’ Modernism: Picabia’s Nudes,” in *Keys to a Passion*, ed. Suzanne Pagé and Béatrice Parent (Paris: Fondation Louis Vuitton, 2016), 210.

2. Talia Kwartler presented these findings in “Francis Picabia’s *Portrait of a Couple* (c. 1942–43): Sources, Techniques, Context” (Paper presented at the symposium Picasso, Picabia, Ernst, Tate Britain, November 25, 2016). The essay will be published in the forthcoming volume *Picasso, Picabia, Ernst: New Perspectives*, ed. Annette King, Joyce H. Townsend, and Adele Wright (London: Archetype Publishing, 2017).

3. For further reading, see the essay on *Aello*, 47–52, in the present volume.



fig. 1

**Fig. 1.** *Portrait d'un couple (Portrait of a Couple)*. 1942–43. Oil on board, 41 5/8 × 30 1/2" (105.7 × 77.4 cm). The Museum of Modern Art, New York. Purchase, 2000. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo: John Wronn, The Museum of Modern Art

**Fig. 2.** "Coquin de printemps" ("Cheekiness of Springtime"). Published in *Paris Magazine*, no. 68 (July 1937): n.p. Photo: Wolff, courtesy Archives Comité Picabia

**Fig. 3.** Promotional photo for *Youth Takes a Fling* (1938, USA, directed by Archie Mayo). Photo: John Wronn, The Museum of Modern Art



fig. 2



fig. 3



fig. 4

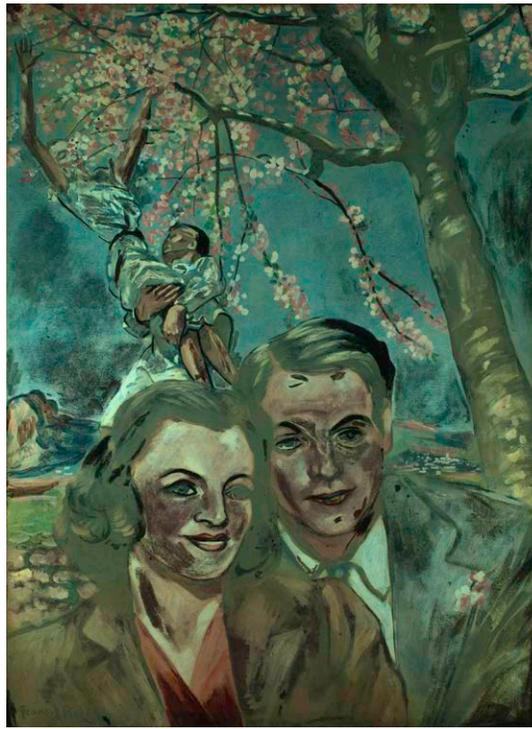


fig. 6



fig. 5

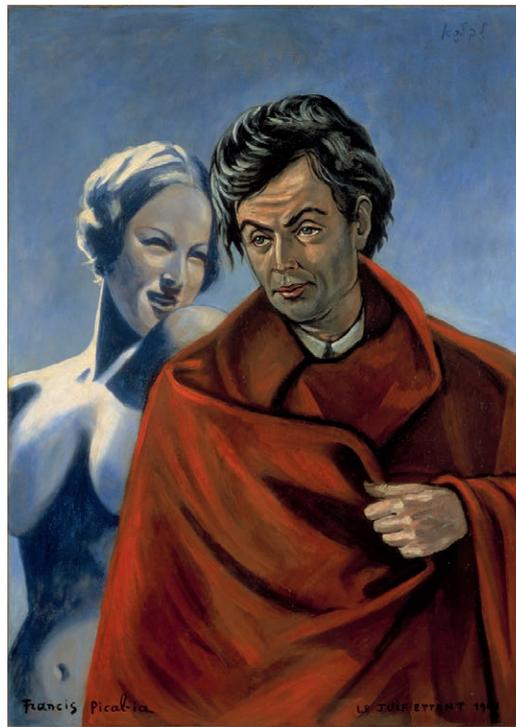


fig. 7

**Fig. 4.** *Portrait d'un couple*. Reflected infrared digital image. Even though the pencil underdrawing is visible in the background around the trees, the painted layers do not conform to the drawing. Likewise, other pencil marks in the faces also do not conform to the facial features, suggesting Picabia's deliberate use of gestural drawing in contrast to other drawing techniques. Photo: Department of Conservation, The Museum of Modern Art, 2016

**Fig. 5.** *Portrait d'un couple*. Digital X-ray image. No reworking or repositioning of the different compositional elements is evident. Photo: Department of Conservation, The Museum of Modern Art, 2016

**Fig. 6.** *Portrait d'un couple*. Ultraviolet visible fluorescence. Reworking is visible in the sky of the background and particularly in the faces of the couple in the foreground. Photo: Department of Conservation, The Museum of Modern Art, 2016

**Fig. 7.** *Le Juif errant (The Wandering Jew)*. 1941. Oil on board, 41 $\frac{5}{16}$  × 30 $\frac{1}{8}$ " (105 × 76.5 cm). Eric Decelle, Brussels. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo courtesy Archives Comité Picabia



fig. 1. *Égoïsme* (Selfishness). 1947–48/c. 1950. Oil on panel, in original wood frame, 60½ × 43⅝" (153.6 × 110.8) unframed; 73¼ × 49⅝ × 4¾" (186 × 126.1 × 12 cm) with frame. Museum Boijmans Van Beuningen, Rotterdam

*Égoïsme (Selfishness)* (fig. 1), a masterpiece of Francis Picabia's late abstract practice, was started in 1947. In 1948, the work was signed in the lower left-hand corner, inscribed "Égoïsme," and dated; it was exhibited at Galerie des Deux-Îles, in Paris, later that year. Over the following two years, Picabia reworked the composition dramatically. When photographed in raking light, the work's textured surface is readily apparent, highlighting these compositional transformations (fig. 2). During one of these subsequent painting campaigns, the work was re-inscribed in the mid-lower section and dated "1947–1950–." The original title, signature, and date were overpainted during this reworking period. Picabia's creative process embraced the concept of layering, both in the physical sense and in the metaphysical layering of meaning and intellectual pursuit within one artwork. The final composition presents a totemic central figure flanked by five colored circles against a black background: its powerful simplicity prefigures Picabia's Point paintings (fig. 3), a group of quasi-monochromes with visible substrata, which the artist made in 1949.

*Égoïsme*, painted on a laminated wooden board, still has its original, simple wooden frame, as evidenced by brushstrokes on the inner edge with paint matching the adjacent color of the painting (figs. 4, 5). The artist reworked the composition after *Égoïsme* was framed, in a manner similar to other works from the late 1940s and early 1950s, including *L'Insensé (The Lunatic)* (fig. 6), *La Feuille de vigne (The Fig Leaf)* and *Les Amoureux (Après la pluie) (The Lovers [After the Rain])* are two earlier examples of Picabia's overpainting and reworking practices.<sup>1</sup>

Close examination of *Égoïsme* revealed numerous condition phenomena on the surface. These conditions apparently stemmed from chemical and physical changes within the paint layers and contributed to issues such as localized flaking paint layers, discoloration, and the protrusion of white oil-based substances commonly referred to as metal soaps. This degradation was caused, in part, by the reworking of the composition, plus the presence of unstable pigments such as zinc white (figs. 7, 8). As a consequence of the instability of the zinc pigments, degradation in the form of metal soaps within the paint layers has caused extensive cracks, protrusions, and localized delamination (figs. 9–11). Furthermore, this aging process has changed the matte-gloss properties of the overlying paint films. This is especially apparent when the surface is viewed under ultraviolet light (figs. 12–14). The resulting complex surface structure presented major conservation challenges,

warranting an in-depth investigation into the painting's structure and materials.

Prior to the treatment of the painting, scientific research was conducted using 3-D imaging techniques under high magnification to characterize conditions, including splits and fractures in the paint surface.<sup>2</sup> Analytical techniques confirmed the paint's binding medium as linseed oil.<sup>3</sup> No evidence of commercial enamel paints such as Ripolin—a material that Picabia first used during his Dada years—was detected in this work. Embedded microscopic paint samples were investigated using cross-section analysis. Analytical techniques, including scanning electron microscope and energy-dispersive X-ray spectroscopy, were employed to further study the paint layer buildup and to determine the pigments that were used (fig. 15). The pigments detected included lead white, zinc white, bone black, cobalt violet, and emerald green. The zinc soap formations were also studied to understand the mechanisms of the degradation process and to determine if the process is still ongoing, a subject of increasing concern as modern paintings age.<sup>4</sup>

Macro X-ray fluorescence scanning helped to reveal the earlier state of the painting by mapping the elemental composition of different pigments.<sup>5</sup> Two pairs of horns are visible, both on the upper and lower mid-section of the painting (cf. figs. 7, 8). Horns like this appear in other works, including *Declaration d'amour (Declaration of Love)* (fig. 16) and *Le Rêve de Suzanne (Suzanne's Dream)* (fig. 17). In its current state, the composition of *Égoïsme* centers upon a white, abstract, phallic totem surrounded by five colored circles; this final form contrasts starkly with the underlying motifs. In particular, an abstract, linear pattern with dots can be seen underneath the final composition when viewed in raking light. It is unclear whether the horn-shaped forms and the linear structure were part of one or two previous states. As in other paintings from this period, including *Veuve (Widow)* (fig. 18), multiple layers of underpainting can be detected.<sup>6</sup>

After the scientific investigation was completed, the treatment focused on stabilization, surface cleaning, and visual integration of the degraded paint surface and losses using conservation materials that were compatible with the aged paint surface. Research and testing confirmed that, due to metal soap formation, some paints were water-sensitive, so treatment with aqueous solutions was avoided. The use of heat was also avoided as much as possible since it could potentially initiate the degradation process anew.<sup>7</sup>

For the structural stabilization of the warped five-layer multiplex plywood panel, an auxiliary external support made of aluminum and wood was attached to the reverse of the panel (fig. 19).<sup>8</sup> This extensive conservation treatment enabled *Égoïsme* to be safely transported to the exhibition in Zurich and New York.

Picabia was aware that some layered paintings would crack; he had experienced this phenomenon already with the *Transparencies*, in which drying cracks appear and were, in some cases, deliberately enhanced, resulting in an “antique” surface appearance.<sup>9</sup> The artist certainly knew about drying cracks and the tendency for upper paint layers to be affected by the underlying layers. Most artists are aware of this and Picabia was, most likely, not an exception. Nonetheless, Picabia would not have been aware that some of his paintings were incubators for metal soap formation. Conservation scientists and conservators have only recently begun to explore this topic; the implications of unstable metallic pigments were not historically questioned by artists.

Picabia may not have been pleased by the self-destructing tendencies of some of his works. Still, this did not deter the artist from his overpainting practice, given that the effects of layering were such an integral part of his approach. It is also possible there was intention and meaning in his use of painted layering that was rooted in a personal philosophy adapted from, among other sources, the Nietzschean concept of eternal recurrence.

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1. For further reading, see the essays on *La Feuille de vigne*, 29–36, and *Les Amoureux (Après la pluie)*, 43–46, in the present volume.
  2. Jaap Boon, Unpublished analytical report on Francis Picabia’s *Égoïsme* (1947–48/c. 1950), JAAP Enterprise for Art Scientific Studies, Amsterdam, and Department of Conservation, Museum Boijmans van Beuningen, Rotterdam (2016).
  3. Ibid.
  4. See Jaap Boon, Gwendolyn P. Boevé-Jones, and Christel van Hees, “Metal Soap Mobility in Two Late Works by Picabia: A Major Challenge and Visual Conundrum” (Paper presented at Metal Soaps in Art, Netherlands Institute for Conservation, Art, and Science [NICAS], Amsterdam, March 14–15, 2016); and *Issues in Contemporary Oil Paint*, Klaas Jan van den Berg, Aviva Burnstock, Matthijs de Keijzer, Jay Krueger, Tom Learner, Alberto de Tagle, and Gunnar Heydenreich, ed. (New York: Springer Publishing, 2013).
  5. Joris Dik, Unpublished analytical report on Francis Picabia’s *Égoïsme* (1947–48/c. 1950), Delft University of Technology, and Department of Conservation, Museum Boijmans van Beuningen, Rotterdam (2016).
  6. For analysis of *Veuve* by the Centre de recherche et de restauration des musées de France (C2RMF) and an illustration of the X-ray of this painting, see the entry by Hélène Lassalle in *Francis Picabia dans les collections du Centre Pompidou, Musée national d’art moderne*, ed. Didier Ottinger (Paris: Éditions du Centre Pompidou, 2003), 100.
  7. Gwendolyn P. Boevé-Jones and Jean-Albert Glatigny, Unpublished conservation treatment report on *Égoïsme* (1947–48/c. 1950), Studio Redivivus, The Hague, and Museum Boijmans van Beuningen, Rotterdam (2016).
  8. Ibid.
  9. For a discussion of Picabia’s induced-cracking practice, see Nathalie Bäschlin and Stefan Zumbühl, “The Hand, 1935/36 by Francis Picabia: Crackle laquer technique as a strategy for dissent” (Poster presented at Picasso, Picabia, Ernst, Tate Britain, November 25, 2016). To be included in the forthcoming volume *Picasso, Picabia, Ernst: New Perspectives*, ed. Annette King, Joyce H. Townsend, and Adele Wright. (London: Archetype Publishing, 2017).



fig. 1



fig. 2

**Fig. 1.** *Égoïsme (Selfishness)*. 1947–48/c. 1950. Oil on panel, in original wood frame, 60½ × 43⅝ × ¼" (153.6 × 110.8 × 0.7 cm) unframed; 73¼ × 49⅝ × 4¾" (186 × 126.1 × 12 cm) with frame. Museum Boijmans Van Beuningen, Rotterdam. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo: Museum Boijmans Van Beuningen, Rotterdam/Studio Tromp

**Fig. 2.** *Égoïsme*. Photographed in raking light from left side. Photo: Gwendolyn P. Boevé-Jones, Studio Redivivus



fig. 3



fig. 4



fig. 5

**Fig. 3.** *Le Noir des noirs (The Black of Blacks)*. 1949. Oil on board, 25⅜ × 21¼" (64.5 × 54 cm). Private collection. Courtesy Galerie Michael Werner, Märkisch Wilmersdorf, Cologne and New York. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo courtesy Galerie Michael Werner

**Fig. 4.** *Égoïsme* (detail). There is black paint on the inner edge of the frame, indicating that the artist applied black pigment directly onto the painting while it was framed. At the lower right corner, black paint consistent with the black of the reworked upper black layer of the composition is visible. Photo: Gwendolyn P. Boevé-Jones, Studio Redivivus

**Fig. 5.** *Égoïsme* (detail). Observation of the work unframed confirms that painting campaigns were undertaken when it was in its frame. The upper black layers clearly cover the earlier composition, which was hidden beneath the rebate of the frame. Photo: Gwendolyn P. Boevé-Jones, Studio Redivivus



fig. 6



fig. 8



fig. 7



fig. 9



fig. 10

**Fig. 6.** *L'insensé (The Lunatic)*. 1948. Oil on board, in original wood frame, 66<sup>5</sup>/<sub>16</sub> × 49<sup>1</sup>/<sub>2</sub> × 2<sup>3</sup>/<sub>4</sub>" (168.5 × 125.8 × 7 cm), with frame. Museum Ludwig, Cologne. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo © Rheinisches Bildarchiv Köln

**Fig. 7.** *Égoïsme*. Macro X-ray fluorescence image scan of zinc white. A pair of horns is visible in the upper part of the composition. Photo: Joris Dik, TU Delft

**Fig. 8.** *Égoïsme*. Macro X-ray fluorescence image scan of lead element. A second pair of pointed horns is evident at the base of the totemic phallus, with a linear structure faintly visible behind it. Photo: Joris Dik, TU Delft

**Fig. 9.** *Égoïsme* (detail). Surface under magnification showing degradation of paint layers caused by the formation of metal soaps in the red circle at the lower right. Photo: Gwendolyn P. Boevé-Jones, Studio Redivivus

**Fig. 10.** *Égoïsme* (detail). Macro-detail of surface, which clearly demonstrates that metal soaps are forming in one particular brushstroke in the mid-left section. This brushstroke appears to have been made with white paint over an area with red and green brushstrokes. Photo: Gwendolyn P. Boevé-Jones, Studio Redivivus



fig. 11

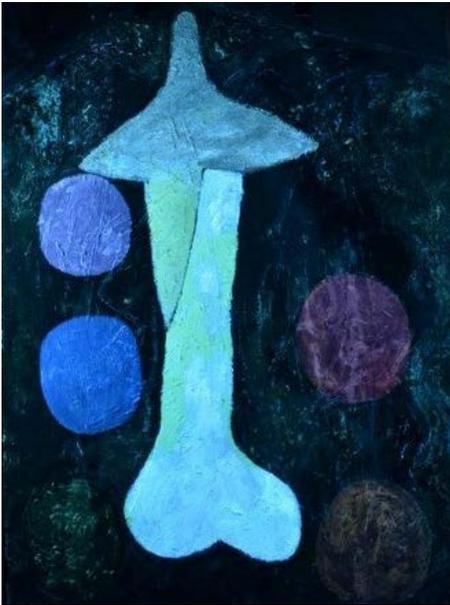


fig. 12

**Fig. 11.** *Égoïsme*. Cross section of microscopic paint sample photographed under high magnification, illustrating metal soap forming in *Égoïsme*. The mostly white protrusions are degradation products of paint that contains zinc white. These metal soaps have grown so large that they have deformed and penetrated upper-lying paint layers. In some instances, the metal soaps fill the cracks, forming rounded and elongated masses at, or just under, the surface. They also have formed globules that ooze out and sag downwards. In some areas, the increased volume has caused extensive interlayer cleavage and delamination. This cross section of a protrusion from *Égoïsme* illustrates that there was a fluid phase when the soap broke through the surface. This globule has now mineralized and solidified to a greater degree than the underlying paint. An excess of linseed oil combined with an unstable form of zinc oxide pigment may have caused this reaction to occur. Photo: Jaap Boon, JAAP Enterprises for Art Scientific Studies

**Fig. 12.** *Égoïsme*. Ultraviolet visible fluorescence. The metal soap formations fluoresce intensely under ultraviolet illumination. Also evident under ultraviolet light is the use of three different white pigments: zinc, lead, and titanium. Photo: Gwendolyn P. Boevé-Jones, Studio Redivivus

**Fig. 13.** *Égoïsme* (detail). Ultraviolet visible fluorescence. Detail of the lower right section between two red circles. The fluorescence visible in ultraviolet light appears as lighter purplish-green layers, indicating that the underlying layer has reacted with the upper black paint layer. Photo: Gwendolyn P. Boevé-Jones, Studio Redivivus

**Fig. 14.** *Égoïsme* (detail). Ultraviolet visible fluorescence. White pigments showing differing visible fluorescence under ultraviolet light: titanium white, lead white, and zinc white. Photo: Gwendolyn P. Boevé-Jones, Studio Redivivus

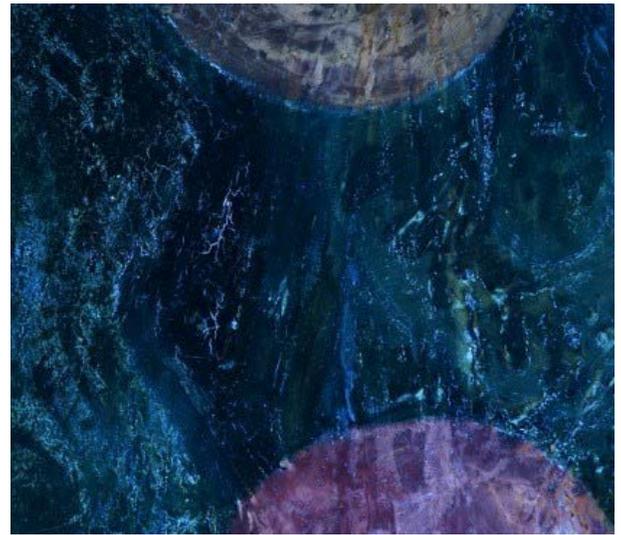


fig. 13

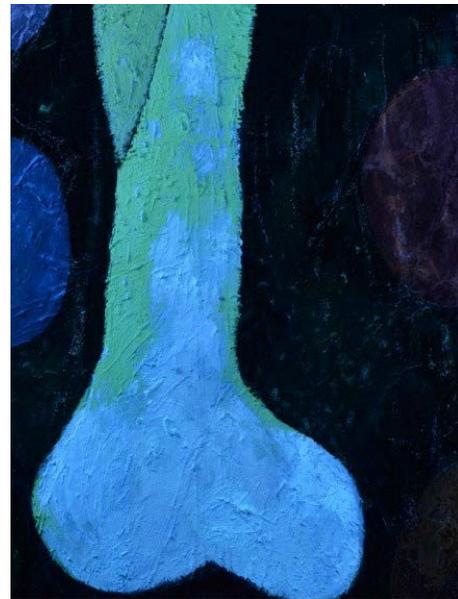


fig. 14



fig. 15

**Fig. 15.** *Égoïsme*. Cross-section analysis in which multiple paint layers are visible in the green circle at the lower left corner. Photo: Jaap Boon, JAAP Enterprises for Art Scientific Studies

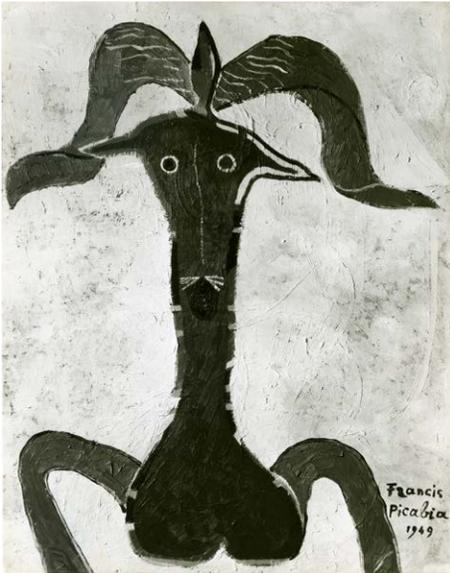


fig. 16

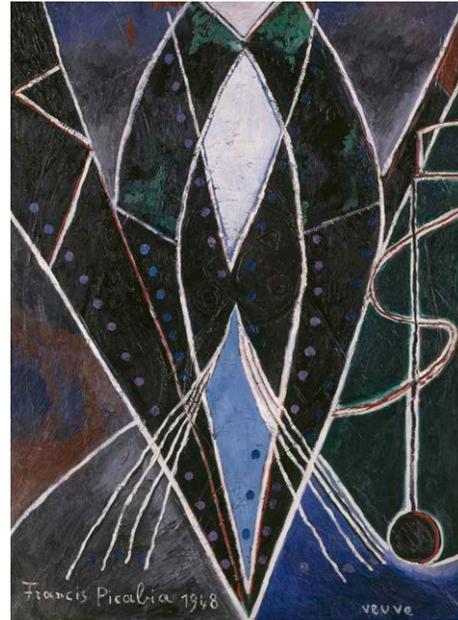


fig. 18



fig. 17



fig. 19

**Fig. 16.** *Declaration d'amour* (*Declaration of Love*). Media, dimensions, and collection unknown. The phallic form with a beast-like head and two pairs of horns depicted in this work shows remarkable similarities with the underlying image of *Égoïsme*, as visible in the macro X-ray fluorescence scans (cf. figs. 7, 8). There is no information available about the palette Picabia used. The work may have been exhibited in *Francis Picabia: peintures sur-irréalistes* at the Galerie Denise René in Paris in 1946. Given this, the date of "1949" may be a later addition to the work. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo courtesy Archives Comité Picabia

**Fig. 17.** *Le Rêve de Suzanne* (*Suzanne's Dream*). 1949. Oil on board, 29 $\frac{5}{16}$  × 20 $\frac{3}{4}$ " (74.5 × 51.5 cm). Collection Charles Szwajcer. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo courtesy Charles Szwajcer

**Fig. 18.** *Veuve* (*Widow*). 1948. Oil on wood, 60 $\frac{5}{16}$  × 45 $\frac{11}{16}$ " (153.2 × 116 cm). Centre Pompidou, Musée national d'art moderne – Centre de création industrielle, Paris. Gift of Mrs. Olga Picabia, 1986. *Veuve* is similar in format to *Égoïsme*, is also on plywood, and was completed the same year as the earlier composition of *Égoïsme*. In *Veuve*, the abstracted female genital forms, with polka dots and long, thickly impastoed linear elements, are very comparable to those of *Égoïsme*. © 2017 Artists Rights Society (ARS), New York/ADAGP, Paris. Photo © Centre Pompidou, MNAM-CCI/Dist. RMN-Grand Palais/Art Resource, New York

**Fig. 19.** *Égoïsme* (verso). An auxiliary support made of aluminum and wood was attached to the reverse the panel. This was carried out in cooperation with panel painting conservator Jean-Albert Glatigny, using methods that support the original panel without the constraint of an overall attachment. Photo: Gwendolyn P. Boevé-Jones, Studio Redivivus

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Following page: Francis Picabia with *Portrait d'un docteur* (first version), summer 1935. Photo courtesy Archives Comité Picabia

