Collaboration of Art and Science in Albert Edelfelt's Portrait of Louis Pasteur: The Making of an Enduring Medical Icon

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SUMMARY: Historians of medicine—and even Louis Pasteur's biographers—have paid little attention to his close relationship with the Finnish artist Albert Edelfelt. A new look at Edelfelt's letters to his mother, written in Swedish and never quoted at length in English, reveals important aspects of Pasteur's working habits and personality. By understanding the active collaboration through which this very famous portrait was made, we also discover unnoticed things in the painting itself, gain a new appreciation of its original impact on the French public's image of science, and better understand its enduring influence on the portrayal of medicine in the art and the popular culture of many countries even to the present day.

KEYWORDS: Pasteur, Edelfelt, painting, portraits, Paris, fine arts

The authors began this joint project in 2010, basing it in part on Richard E. Weisberg's 1995 dissertation. After Weisberg died unexpectedly in 2011, new research and the final text became Hansen's responsibility. The entire dissertation is now publicly accessible at the website "The Scholarly Legacy of Richard E. Weisberg (1943-2011): Medicine in Art in Nineteenth-Century France" at http://faculty.baruch.cuny.edu/bhansen/weisberg.home. htm. Hansen is grateful to Richard's wife, Kathryn Annette Clark, for making his research files available. Hansen also extends his special thanks to Dean Jeffrey M. Peck of the Weissman School of Arts and Sciences of Baruch College, CUNY, for a summer research stipend and for funding of travel to Finland and France. Support was also received from the PSC-CUNY Research Awards Program of the City University of New York. The interlibrary loan office at Baruch College has been unfailingly helpful. For assistance and intellectual support, Hansen expresses appreciation to the individuals acknowledged in the notes, to the Bulletin's anonymous referees, and to generous friends and colleagues: Boaz N. Adler, Roslyn Bernstein, Kathryn Annette Clark, Caitlin Hawke, Hannu Kosonen, Helene Lipstadt, Pete Livingston, Mark Sullivan, and Antony Ward. Except where a published English version is cited, Hansen accepts responsibility for all foreign-language passages quoted in this article.

To this day, Albert Edelfelt's image of Louis Pasteur dominates official and popular memory of the great medical chemist. Although the large canvas is just one of several portraits of Pasteur, the painting and its many reproductions have pushed all others aside. Often reproduced, the painting is well known to historians, chemists, and physicians. While not, of course, the only famous portrait of a scientist, it has a special importance for historians of science and medicine because—unlike the singular portraits of Lavoisier, Darwin, and Einstein, or even familiar photographs of Jonas Salk or of James Watson and Francis Crick—this presentation of Pasteur helped to establish a new archetype of the scientist that was reproduced again and again.

Our study has four main contentions. First, when Pasteur posed for Edelfelt, he was not the passive sitter he was for other portrait artists. In this case he took an unusually active role in the design, scientific content, and reception of the portrait. Second, the painter's letters offer singular insights into the genesis of this painting. Third, and more remarkably, they open an unusual window into private aspects of Pasteur's scientific work and personality. Fourth, this painting had a substantial effect on the presentation of scientists in art and illustration. We believe the painting's historical importance lies not only in its immediate success with critics and viewers, but also in the way it came to serve as a template for showing scientific genius. Over the course of the twentieth century, artists, the media, and the public all continued to picture the archetypal laboratory scientist in terms of the model created in 1885 by Edelfelt for Pasteur.

In a word, Edelfelt's contribution to the history of medicine is that he produced a portrait giving both contemporaries and later generations direct visual access to an individual while at the same time creating an adaptable formula for portraying scientists that has influenced their depiction in all media. Yet the collaborative genesis of this portrait has remained unknown, despite the painting's familiarity, because of the many documentary obstacles to research. The painter is well known only in his native Finland and the Scandinavian countries and among historians of nineteenth-century painting. Medical history scholarship outside of Nordic countries has been inhibited by the lack of translations of Swedish and Finnish sources. Although this study uses those sources and is indebted to art historical scholarship, it is intended primarily as a contribution to the history of science and medicine in France in the 1880s, while also suggesting that this image of Pasteur affected the way Europeans and Americans have come to picture the scientist at work.

The Portrait and Its Imitators

Before considering the creation of Edelfelt's portrait, we need a quick look at the painting itself and a few of its later incarnations. Albert Edelfelt's large canvas (154 × 126 cm) now hangs in the Musée d'Orsay in Paris (see Figure 1). A copy made by the artist himself for the Pasteur family may be seen at the Pasteur Institute. The original portrait was quickly reproduced in catalogues, newspapers, and magazines through monochromatic photogravures, engravings, and a fine early etching by Leopold Flameng. When Edelfelt first learned that his painting would be reproduced by Flameng, he was thrilled; in a letter to his mother he proclaimed Flameng "France's best engraver."

Pasteur stands in his laboratory, attired in the street clothes typical of doctors and laboratory scientists prior to the introduction of lab coats a decade later. He holds a bottle with two openings that allow a flow of air to dry a piece of rabbit spinal cord hanging from a thread at the top. He contemplates the bottle's dangerous and powerful reagent (virulent rabies virus) with an intense focus, as if in a trance. In the painting, there is no movement, no action. But it is fair to say that this man is actively at work.⁴

- 1. Patrick Sourander, "Edelfelts berömda Pasteurporträtt: originalet och repliken," Nordisk medicinhistorisk årsbok (1983): 149–54.
- 2. The Flameng print in the collections of the Chemical Heritage Foundation in Philadelphia is noteworthy in being signed by Flameng and personally inscribed "À mon cher Raymond Signouret." We are grateful to Amanda Shields, curator of fine art and registrar, for her assistance with our research. Other reproductions are discussed below.
- 3. To his mother, June 3, 1886 (Collected Letters 3:139). Ur Albert Edelfelts Brev is the common title of an extensive selection of Edelfelt's letters appearing in five separate volumes between 1917 and 1930. Each book carries a different subtitle, but the title pages make no reference to the series as a whole, and they are not given volume numbers. As such, libraries have generally catalogued them as unrelated books, and no American library seems to have a complete set of the five volumes. Although it was edited by his sister Berta Edelfelt, the title pages do not indicate her role. The city and publisher varied as follows: vol. 1, Drottning Blanca och Hertig Carl (Helsinki: Holger Schildts Förlag, 1917); vol. 2, Resor och intryck (Stockholm: Fröléen and Co., 1921); vol. 3, Liv och arbete (Stockholm: Almqvist and Wiksell Förlag, 1926); vol. 4, Middagshöjd (Stockholm: Holger Schildts Förlag, 1928); and vol. 5, Kring Sekelskiftet (Stockholm: Holger Schildts Förlag, 1930). We cite the set as Collected Letters with volume and page. Many of the passages we quote are also found in an exhibit catalog by Satu Tiivola, Albert Edelfelt (1854–1905) Punkaharjun Retretissä, 18.6–28.8.1983 (Helsinki: Helsingin Taidetalo, 1983), 54-62 (in Finnish) and 66-68 (in Swedish), cited here as "Edelfelt Letters 1983." In the 1990s, some of the Edelfelt letters were translated into English by Mrs. Chauncey Frederickson Leake for use by Richard E. Weisberg. In late 2012, an entirely new translation was prepared for Hansen by Mr. Hannu Kosonen, M.A., of Helsinki, a professional linguist and generous friend.
- 4. That "chemistry dominates the popular image of science overall" is an observation made by Joachim Schummer and Tami I. Spector in "The Visual Image of Chemistry:



Figure 1. Albert Edelfelt, *Louis Pasteur* (1885), oil on canvas, 154 × 126 cm. Musée d'Orsay, Paris, France. Photo Gérard Blot/Hervé Lewandowski. ©RMN-Grand Palais/Art Resource, NY (used with permission).

After the turn of the twentieth century, the Edelfelt painting came to be used in advertising, in films, and on numerous book covers. A full account of its influence would take us far afield, but even a few examples of how it shaped the presentations of other scientists will suggest the range of its long-term impact. We may begin with a cartoon drawing. Any child looking at *Science Comics* in 1946 knew how to read the face that opened a story called "White Magic: The Miracle of Penicillin" (Figure 2). It was not just

Perspectives from the History of Art and Science," chap. 9 (213–57) in *The Public Image of Chemistry*, ed. Joachim Schummer, Bernadette Bensaude-Vincent, and Brigitte Van Tiggelen (Hackensack, N.J.: World Scientific, 2007), 214. Their chapter includes numerous depictions of a person holding up a flask. Their narrative, however, presumes an unchanging meaning for an image running from the medieval uroscopy figures and the early modern quack doctors in genre paintings all the way into the twenty-first century. In contrast, we see a discontinuity in cultural meaning between the old uroscopy flasks and the new laboratory glassware of late nineteenth-century chemists like Pasteur and their successors. It seems unlikely to us that nineteenth-century viewers regarded Edelfelt's painting as part of a visual tradition that had been common only centuries earlier.



Figure 2. Anonymous, "White Magic: The Miracle of Penicillin," *Science Comics* 1 (January 1946): 9 (Bert Hansen collection).

the lab coat or the flask in his hands that marked the man as a medical hero; it was his thoughtful gaze. A key feature distinguishing Edelfelt's innovative presentation from the hundreds of portraits of physicians and scientists from the sixteenth century onward is that Pasteur is absorbed in his work and seems unaware of the painter or the viewer. In almost all portraits of a doctor or natural scientist, the figure is posing—whether with professional accoutrements (rarely) or without them (typically)—with a connection between observer and observed in the subject's gaze, which often meets the viewer's.⁵

Over the decades since 1885, many scientists have been drawn, painted, or photographed in this same manner. In St. James's Church in Paddington, London, for example, one can view a 1952 stained-glass window with

5. An easy glimpse of the common portrait styles may be found in illustrated catalogues of medical institutions with large portrait collections such as the following two examples. Julie S. Berkowitz, *The College of Physicians of Philadelphia Portrait Catalogue* (Philadelphia: College of Physicians of Philadelphia, 1984), and Gordon Wolstenholme and David Piper, *The Royal College of Physicians of London Portraits Catalogue*, vol. 1 (London: J. & A. Churchill, 1964) and vol. 2 (Amsterdam: Elsevier, 1977). The second volume includes two useful essays: "Collections of Portraits in Western Europe" by Rudolf E. O. Ekkart (1–23) and "Take the Face of a Physician" by David Piper (24–49).

the standing figure of Alexander Fleming at a lab bench contemplating a petri dish. A more recent echo of the Edelfelt model, though without the glassware, is a large painting of the Nobel-prize-winning chemist Dorothy Hodgkin by Maggi Hambling in 1985. Hodgkin, seated at a desk cluttered with papers and molecular models, is at work in deep concentration. She holds notes in one hand and draws a molecular diagram with another, but takes no notice of our presence. Photographers, too, often followed Edelfelt's precedent closely, as seen in two midcentury examples from *Life* magazine, Camille Guerin by Carl Perutz (1946) and Jonas Salk by Alfred Eisenstaedt (1954) (see Figure 3).

Numerous additional examples could be cited.⁸ Two magazine covers in the following decades illustrate a strong continuity with the Edelfelt composition, but with different messages. Alon Reininger's photograph of AIDS researcher Dr. Alvin Friedman-Kien on the cover of *New York* magazine of January 12, 1987, embodies the heroicizing pattern (see Figure 4). A *Time* magazine cover of April 18, 1977, "The DNA Furor: Tinkering with Life," far less typically shows an anonymous, sinister-looking man in a lab coat peering at a test tube.⁹

Portraits of Svante Arrhenius, Alexis Carrel, Marie Curie, and Alexander Fleming by photographers and magazine illustrators offer many other ready examples of the scientist at work, alone in his or her concentration, portrayed as if observed candidly and spontaneously without posing. While we do not mean to suggest that this was the only way scientists and

- 6. Kevin Brown, *Penicillin Man: Alexander Fleming and the Antibiotic Revolution* (Stroud, Gloucestershire: Sutton, 2005), 237.
- 7. The painting *Dorothy Hodgkin* by Maggi Hambling is in the National Portrait Gallery in London. It may be seen online at http://www.npg.org.uk/collections/search/portrait/mw07497/Dorothy-Hodgkin. It appears on the cover of W. D. Hackmann, *Apples to Atoms: Portraits of Scientists from Newton to Rutherford* (London: National Portrait Gallery, 1986), and it is illustrated and discussed in Ludmilla Jordanova, *Defining Features: Scientific and Medical Portraits*, *1660–2000* (London: Reaktion, 2000), 153–58. Both of these important books are centered on British portraiture. Scientific portraits on the Continent have not received similar examination. A recent exception is Nick Hopwood's account of Carl Seffner's marble bust of Wilhelm His, "A Marble Embryo: Meanings of a Portrait from 1900," *Hist. Workshop J.* 73 (Spring 2012): 5–36.
- 8. When the actor Paul Muni was playing Pasteur in the 1936 film *The Story of Louis Pasteur* (Warner Brothers, 1936), he adopted the Edelfelt pose, as can be seen in a publicity still, reproduced in Bert Hansen, *Picturing Medical Progress from Pasteur to Polio: A History of Mass Media Images and Popular Attitudes in America* (New Brunswick, N.J.: Rutgers University Press, 2009), 138, which offers additional examples as well.
- 9. This cover may be seen online at http://content.time.com/time/covers/0,16641,19770418,00.html.

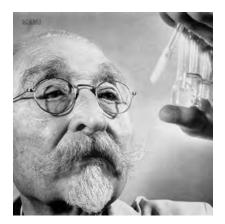




Figure 3. Carl Perutz, "Camille Guerin," *Life* (May 2, 1949): 67 © Carl Perutz (used with permission of the photog-

rapher's estate, courtesy of Pete Livingston, http://perutz.net/), and Alfred Eisenstaedt, "Jonas Salk," *Life*, February 22, 1954, 120 (used with permission of Time Inc. and Getty Images, Alfred Eisenstaedt/The LIFE Images Collection, "Dr Jonas Salk at Work").

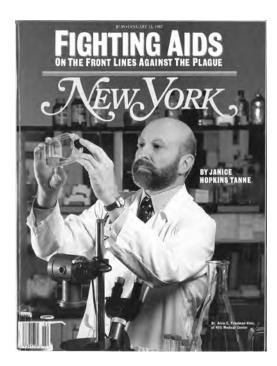


Figure 4. Dr. Alvin E. Friedman-Kien, photographed by Alon Reininger, on the cover of *New York Magazine*, January 12, 1987 (cover reprinted with permission of *New York Magazine*/ New York Media).

physicians were illustrated over the course of the twentieth century, it was perhaps the single most common pattern.¹⁰

The Promising Young Artist and His Famous Subject

In early 1881 Louis Pasteur's son Jean-Baptiste introduced his famously sober and hardworking father to a young Finnish painter about whom he had written. Louis Pasteur was then at the top of his profession—though he was to make additional major discoveries over the next few years. Pasteur was already famous for discoveries about asymmetry in crystals and molecules and for defeating the proponents of spontaneous generation. He had made major contributions to the understanding of fermentations, thereby solving problems in the industrial production of vinegar, wine, and beer. Studying silkworm diseases, he achieved significant success. Pasteur's work on airborne microbes led Joseph Lister to the revolutionary practice of antisepsis in surgery. In the early 1880s Pasteur earned wide recognition for his anthrax vaccine. The rabies breakthrough still lay in the future. Yet, another important dimension of his life went unnoticed except by his family and the artists he befriended: Pasteur was passionate about the fine arts even after he put his own drawings aside at age nineteen to devote himself to science. His long-standing personal involvement with art and art exhibits—which has largely been ignored by his biographers—nurtured his special bond with the young Albert Edelfelt and played a role in their successful collaboration.¹¹

10. The claim that Edelfelt's portrait of Pasteur was a key element in a wider iconographic shift that started in Paris was developed at length in Richard E. Weisberg's 1995 dissertation, "The Representation of Doctors at Work in Salon Art of the Early Third Republic in France" (Ph.D. diss., New York University, 1995). Our article uses material from that dissertation, but the argument is grounded in new research and new sources. The authors share credit for the research, with Hansen taking full responsibility for the text. Only after a visit to Helsinki in 2013 did Hansen learn of a rarely cited article from 1984 that anticipated some aspects of our work. In English its title reads "The Portrait of Louis Pasteur by Albert Edelfelt in the Light of the History of Science." See Matti Haltia and Patrick Sourander, "Albert Edelfeltin Pasteur-muotokuvan oppihistorialista taustaa," *Hippokrates: Suomen Lääketieteen Historiae Seuran vuosikirja = Årsskrift för Finlands Medicinhistoriska Sällskap = Annales Societatis Historiae Medicinae Fennicae* 1 (1984): 57–73. Overlapping material is primarily in quotations from the artist's published letters. This 1984 article does not emphasize Pasteur's collaboration with the artist, call attention to the new light the letters shed on Pasteur's life, discuss Salon reviews of paintings of Pasteur, or make note of the Edelfelt painting's relationship to later imagery.

11. Pasteur's lifelong engagement with the visual arts, though not with music or theater, is the subject of Hansen's current research. Early results were presented as the John McGovern Lecture at the American Osler Society Meeting in April 2013, "Louis Pasteur: Exploring His Life in Art." A summary of this lecture was published by the society, and a

Edelfelt, age twenty-six in 1881, had been living in Paris most of the time since 1874. Albert had shown early promise in art, and he received a fellowship to study history painting in Antwerp at age nineteen. He moved to Paris the following year. Becoming a member of Jean-Léon Gérôme's atelier, he also attended Gérôme's lectures on history painting at the École des Beaux Arts. His circle included Jules Bastien-Lepage, Pascal Dagnan-Bouveret, Henri Gervex, and John Singer Sargent. 12 He divided his attention between Finnish subjects (usually landscapes and folk-life scenes) and Parisian ones (often portraits). In the Salon of 1880, for example, he exhibited one painting of each kind: a naturalistic plein air scene, Le convoi d'un enfant (a peasant family in a rowboat bringing a child's coffin to an island graveyard), and a formal portrait of M. Koechlin-Schwartz (mayor of the seventh arrondissement). His plein air canvas of an outdoor worship service, Service divin au bord de la mer, won a silver medal at the Salon of 1882 and was purchased by the state for the Musée du Luxembourg.13

Edelfelt became acquainted with Pasteur's son, Jean-Baptiste, in 1880, after Jean-Baptiste favorably reviewed *Le convoi d'un enfant* in a magazine

PDF file of the booklet may be accessed at http://aosler.org/annual-meeting/mcgovern-presentations/. Two further articles are forthcoming, both by Hansen and Weisberg and both in the *Journal of Medical Biography*: "Louis Pasteur's Three Artist Compatriots—Henner, Pointelin, and Perraud: A Story of Friendship, Science, and Art in the 1870s and 1880s" and "Louis Pasteur (1822–95), His Friendships with the Artists Max Claudet (1840–1893) and Paul Dubois (1829–1905), and His Public Image in the 1870s and 1880s."

^{12.} In addition to the studies on Edelfelt's life and work cited below, three books by Gabriel Weisberg provide insight on Edelfelt's artistic circles and his place in the "realist" and "naturalist" movements in French painting. See *The Realist Tradition: French Painting and Drawing, 1830–1900* (Cleveland: Cleveland Museum of Art, 1980); *Against the Modern: Dagnan-Bouveret and the Transformation of the Academic Tradition* (New York: Dahesh Museum of Art, 2002); and *Illusions of Reality: Naturalist Painting, Photography, Theatre and Cinema, 1875–1918* (Brussels: Mercatorfonds, 2010).

^{13.} The most complete modern account of Edelfelt's life and career is Albert Edelfelt, 1854–1905: Jubilee Book (Helsinki: Ateneum Art Museum, Finnish National Gallery, 2004). It was published in separate Finnish and English versions. No editor or compiler is indicated; the foreword is signed by Soili Sinisalo, the museum director. It is cited hereinafter as Edelfelt Jubilee Book. Also valuable are Denise Bernard-Folliot, "Albert Edelfelt," Gazette des Beaux-Arts, ser. 6, 102 (November 1983): 179–86; Frank Clausrat, "L'Oeuvre d'Albert Edelfelt et sa réception en France (1877–1889)," in L'Horizon inconnu: l'art en Finlande, 1870–1920 (Helsinki: Ateneum, 1999), 20–31; and Aimo Reitala's long Albert Edelfelt entry in the National Biography of Finland (1993–2001), which is also available online in English under the rubric "100 Faces from Finland—A Biographical Kaleidoscope" at http://www.kansallisbiografia. fi/english/. A recent catalogue essay is Riitta Ojanpera, "L'art finlandais de la France, 1870–1914," in Échappées nordiques. Les maîtres scandinaves et finlandais en France—1870–1914 (Paris: Somogy Éditions d'Art, 2008), 61–93.

article. In a series of articles in *Le Moniteur universel* titled "The Studios of Young Artists," Jean-Baptiste devoted an installment to Edelfelt.¹⁴ In early 1881 Edelfelt painted a portrait of Jean-Baptiste, commissioned by his father.¹⁵ Edelfelt was warmly welcomed into the Pasteur family, and he eventually made portraits of Jean-Baptiste's wife, his sister, his brother-in-law René Vallery-Radot, his niece Camille, his nephew Louis, and his mother.¹⁶

Collaborating on a New Kind of Portrait

Edelfelt began work on the portrait in mid-April 1885 with Pasteur's active cooperation, a process we can follow closely thanks to frequent letters Edelfelt wrote to his mother back home. Like the famous letters (six hundred of them) that Vincent van Gogh sent to his brother Theo in the 1870s and 1880s, Edelfelt's letters provide access to an artist's thinking as he struggled with esthetic and practical choices, emotional insecurity, frustrations, satisfactions, and various technical aspects of creating works on canvas. To f the roughly twelve hundred letters Edelfelt sent home, the ones of special interest to us are the twenty or so directly concerned with the Pasteur portrait: choice of a setting, the lab ware, and the contemplative pose—all elements in the painting's success. A widely disseminated story in the authorized biography by Pasteur's son-in-law René Vallery-

- 14. Fabrice (pseudonym of Jean-Baptiste Pasteur), "Chronique des arts: Les ateliers des jeunes," *Le Moniteur Universel*, no. 91 (April 2, 1881): 363 (p. 3 of this issue), cols. 1–2. The identification of Jean-Baptiste with "Fabrice" is clear from a letter Edelfelt wrote home on November 29, 1880, in which he reported that Jean-Baptiste brought a draft of the article to his studio and read it aloud to him. This letter was not included in the five-volume collection of the artist's letters cited herein as *Collected Letters* (n. 3). An image of the handwritten letter is now accessible online at https://www.finna.fi/Record/sls.SLSA%2B367_SLSA%2B367_brev_1880_55, courtesy of the Society of Swedish Literature in Finland (accessed July 16, 2013). For locating the letter and translating part of it for us, we thank Dr. Tutta Palin, adjunct professor and senior research fellow in the Department of Art History at the University of Turku (email, July 16, 2013).
- 15. Bertel Hintze, *Albert Edelfelt*, 3 vols. (Helsinki: Söderström, 1942–44) is the standard monograph on the artist, of which volume 3 is a *catalogue raisonné*. The portrait of Jean-Baptiste is catalog number 186, and this entry mentions the commission.
- 16. Pasteur's relationship with Edelfelt has been briefly discussed in Jacques Gillard, *Rappelez-vous Pasteur: L'arboisien: L'artiste et ses amis artistes* (Arbois: Association Arbois-Pasteur, 1995), 47–56.
- 17. Vincent van Gogh, *The Complete Letters*, 3 vols., 2nd ed. (Boston: New York Graphic Society, 1978). The two artists knew each other's work and might have been acquainted. Van Gogh "wrote admiringly of Edelfelt's ability to show feelings and his skill at expressing fervent prayer through an individual's entire being." *Edelfelt Jubilee Book* (n. 13), 107.

Radot erroneously makes the composition appear as an entirely fortuitous inspiration; and the account gives Pasteur no role. "Edelfeldt [sic], the Finnish painter, begged to be allowed to come into the laboratory for a few sketches. Pasteur came and went, attending to his work and taking no notice of the painter. One day that Edelfeldt was watching him thus, deep in observation, his forehead lined with almost painful thoughts, he undertook to portray the savant in his meditative attitude." In fact, Edelfelt's settings and compositions were anything but accidental. According to Ojanpera, "The portraits of subjects painted in their usual environment, skillfully composed, but giving an impression of spontaneity, had been Edelfelt's trademark from the beginning of the 1880s." 19

That Pasteur helped Edelfelt to fashion an image in Edelfelt's customary manner of working is documented in Edelfelt's correspondence. These letters to his mother are so unusual, so inaccessible, and so informative that we quote from them at length. They make it clear that from the start Edelfelt imagined portraying Pasteur in his working milieu. "Monday, I will again go to see the old fellow Pasteur to see if there is a possibility to make something of him in the laboratory because it is only there, in that environment, that I want to paint him. The old fellow Pasteur in tails and high collar is something ridiculous. No, he shall be exactly in his environment: glasses on his nose, the little 'beanie' on his head, and the microscope in front of him."²⁰

Edelfelt's testimony reveals that Pasteur became completely involved in the painting's composition and extremely concerned that Edelfelt get the science right. According to Edelfelt, Pasteur's assistants were constantly at him, asking questions and requesting that he attend to matters himself. On Thursday, April 23, Edelfelt wrote,

18. René Vallery-Radot, *The Life of Pasteur*, trans. R. L. Devonshire (New York: Doubleday, 1915), 440.

19. Ojanpera, "L'art finlandais" (n. 13), 74. Edelfelt's move away from romantic historical scenes to "milieu portraits" in the 1880s is examined by Aimo Reitala in the *National Biography of Finland* (n. 13). We regret that we have not been able to use two Finnish-language dissertations on Edelfelt: (1) Anna Kortelainen, "Albert Edelfeltin fantasmagoria: nainen, 'Japani,' tavaratalo" ["Albert Edelfelt's Phantasmagoria: Woman, 'Japan,' and the Department Store"] (Helsinki: Suomalaisen kirjallisuuden seura, 2002) and (2) Tutta Palin, "Oireileva miljöömuotokuva. Yksityiskohdat sukupuoli- ja säätyhierarkian haastajina" ["The Symptomatics of the *Milieu Portrait*: Detail in the Service of the Challenging of Gender and Class Hierarchies"] (Helsinki: Kustannus Oy Taide, 2004). Hansen thanks Dr. Palin for a three-page English summary of her dissertation shared by email (July 16, 2013). Milieu portraits in general are discussed below. For the Pasteur canvas interpreted as a milieu portrait, see also Rakel Kallio and Douglas Sivén, *Albert Edelfelt: 1854–1905* (Helsinki: Douglas Productions, 2004), 150.

20. April 18, 1885 (Collected Letters [n. 3], 3:58, also "Edelfelt Letters 1983," 54).

Last Monday I visited the old man in his laboratory and he showed me everything there, explained all his experiments, etc. He spent at least an hour's time with me and was as warm as possible. He let me understand that he would have nothing against my painting him, but when and how? With every blink of an eye, his assistants came and asked him this and that, and frequently he had to go himself to make sure of this, that, and the other on the hundreds of rabbits, dogs, monkeys, guinea pigs, hens with which he is experimenting.²¹

Affording us an insider's experience of the day-to-day activity in the laboratory, a letter like this counters the traditional view that Pasteur disliked visitors, allowed no interruptions, and worked in silence. ²² Edelfelt's letters reveal two new perspectives on this matter. Though a stranger to science and not a staff person, Edelfelt was made very welcome, and insiders frequently disturbed the silence with questions and even arguments.

Next Sunday, I am invited for dinner. Pasteur is on the brink of making the biggest discovery he has done in his lifetime: to find a vaccine for rabies. All his experiments on animals have succeeded. Now the question is to see whether he will succeed with humans. . . . I would like to paint the old fellow in the laboratory and in front of his creatures, but I immediately noticed that the location was highly unsuitable for painting although with its jars, chemical apparatus and high windows, it was very picturesque. And then, shall I really dare to bother such a man? I am very much in doubt and insecure. 23

A few weeks later, upon his return from a short work trip to Italy, Edelfelt was able to write on May 27 that he would start with Pasteur the following week.

Today I was in the laboratory the whole morning looking for a place for the painting. There are four or five rooms with different light. Now the question is to get something that is characteristic without seeming disturbing. He spends two hours daily in a large lighted basement with his creatures, but there he would appear like a veterinarian. When he studies with his microscope, he is always *standing*. His writing room looks like any old office—papers and books everywhere. He was kind and promised that I would not be disappointed with him as a model. Furthermore, he is interested in painting. Since he was sixteen years old he absolutely wanted to be a painter, and during several summers he

^{21.} April 23, 1885 (Collected Letters [n. 3], 3:59-60, also "Edelfelt Letters 1983," 54).

^{22.} A key source for the familiar picture is Emile Roux, "L'oeuvre médicale de Pasteur," 527–48, in *Agenda du chimiste*, ed. Georges Salet et al. (Paris: Librairie Hachette et Cie., 1896), at 545. The enforced silence in Pasteur's laboratory was also reported by Adrien Loir in "À l'ombre de Pasteur," a memoir that appeared in fifteen installments in *Le mouvement sanitaire* 14 and 15 (1937–38): 14:279–80. See also Patrice Debré, *Louis Pasteur*, trans. Elborg Forster (Baltimore: Johns Hopkins University Press, 1998), 140.

^{23.} April 23, 1885 (Collected Letters [n. 3], 3:59-60, also "Edelfelt Letters 1983," 54).

therefore occupied himself with the noble art. He has made a lot of portraits in pastel. . . . He could have made a name for himself in this field.

With a real scientist's eagerness, he shows and explains to me all his deliberations. And he does it in such a non-technical manner that I understand it all. . . . A young doctor, Loir, Pasteur's nephew, promised to assist me with advice. Today I saw ten rabid dogs. They were really difficult to watch. He promised to sit for me three afternoons a week and, if necessary, to give me a fourth, Thursday, which he usually spends at the *Académie française*. ²⁴

In early June, he wrote, "The portrait of Pasteur should turn out well—although the light is very poor because the laboratory is surrounded by large chestnut trees which throw the strangest green shadows on the face of the old man." Further evidence of Pasteur's indulgence of the painter's needs is found in the published recollections of Adrien Loir, who worked in the laboratory at that time. He recalled that with Pasteur's phobia about germs in the air, he strictly controlled access to the balances room where cultures were seeded (a "sacrosanct space"), and its door would normally be opened only for a moment. Yet in order to help Edelfelt, Pasteur permitted the door to be left standing open for several hours. In the portrait, we see in the distance the room's table and glassware and light entering from a window, although the doorway is not indicated so viewers seem to see only a single deep room. In an oil study for the portrait in the Finnish National Gallery, however, the doorway is visible, making the separation of the two rooms evident. The surrounded by the separation of the two rooms evident.

Edelfelt also reported to his mother on Pasteur's personality and on arguments with Émile Roux. The scientific aspects of the Pasteur–Roux conflict are not germane here, but a mid-June letter reveals the intimate and potentially embarrassing access that the generally suspicious and often private Louis Pasteur was giving to Edelfelt.²⁸

The old guy Pasteur is rather complicated a character. Certainly a genius, but so methodical, diligent and thorough-going that he could in this respect be compared with a civil servant or a meticulous rentier. He is naive about many

^{24.} May 27, 1885 (Collected Letters [n. 3], 3:67–68, also "Edelfelt Letters 1983," 56), emphasis original.

^{25.} June 5, 1885 (Collected Letters [n. 3], 3:76, also "Edelfelt Letters 1983," 56).

^{26.} Loir, "À l'ombre de Pasteur" (n. 22), 14:88.

^{27.} Hintze, *Albert Edelfelt* (n. 15), 3:74, cat. no. 331, reproduced in black and white on 1:185. A color image is on the website of the Ateneum Art Museum of the Finnish National Gallery at http://kokoelmat.fng.fi/app?si=A+II+1506 (accessed November 28, 2013).

^{28.} For the conflict, see Gerald L. Geison, *The Private Science of Louis Pasteur* (Princeton, N.J.: Princeton University Press, 1995), esp. chap. 9, as well as Geison, "Pasteur, Roux, and Rabies: Scientific versus Clinical Mentalities," *J. Hist. Med. & Allied Sci.* 45 (July 1990): 341–65.

things. He has a strange respect and admiration for everything as it is, a real conservative nature. He keeps fighting ferociously with his first assistant Roux, who has a really revolutionary nature. They mostly argue about academies and institutions, which are attacked by Roux and defended by Pasteur.²⁹

Pasteur as a Supremely Confident Risk Taker

In the sweep of medical history, it is normal to date Pasteur's first rabies treatments in humans simply to 1885 without needing to be more specific. Yet to evaluate the decisions made by Pasteur and by Edelfelt in creating this painting, it is necessary to attend much more closely to the timing of their activities during 1885.

The composition that Edelfelt developed shows Pasteur holding one of the drying bottles in which infected spinal cord dissected from a rabbit that died of rabies becomes gradually less virulent over a roughly two-week period. At least two of Edelfelt's preliminary studies used smaller bottles. But then Pasteur intervened.³⁰

He made me take away a microbottle, and he put into my hand instead a larger glass dome with a piece of dog [sic] spinal cord dangling from a thread. According to the old man, this is not fully understood yet, but it would have great importance in the future. . . . Additionally, he has reviewed all the paraphernalia that I have placed around him. He has made me remove some that were unnecessary au point de vue scientifique [from a scientific point of view], put others there instead, etc. In a word, he is extremely interested. He has given me compliments about my diligence and ability to work in frying heat. "Vous êtes un travailleur, M. Edelfelt" ["You're a hard worker, Mr. Edelfelt"]. Would to God that he be right.³¹

There could have been no finer compliment coming from Pasteur, who had spent his whole life working hard and urging the same on all around him (beginning with his poor sisters when he was a teenager). Pasteur expressed his warm feelings and high regard for Edelfelt in a letter to Albert's young sister Annie for her autograph collection earlier the same week. The text is right in line with Pasteur's reputation for being unusually kind to children, yet this also shows an endearing whimsy that is otherwise hard to discern in the personality of the famously sober scientist. "I do not know, *chère mademoiselle*, if the customs of your country permit a man of a

^{29.} June 12, 1885 (Collected Letters [n. 3], 3:80, also "Edelfelt Letters 1983," 57).

^{30.} These preliminary studies are illustrated in Hintze, *Albert Edelfelt* (n. 15), 1:184–85; they have catalog numbers 329 and 331 in vol. 3.

^{31.} June 28, 1885 (*Collected Letters* [n. 3], 3:85, also "Edelfelt letters 1983," 57). Edelfelt's letter used the French words.

quite respectable age to say to a young person that he loves her without ever meeting her. But I dare to do it by writing this declaration. I hope you will excuse me in any case if I add that I see you and I 'divine' you by means of the moral, intellectual, and physical qualities of your brother, the young Finnish painter and a friend of France." In this remarkable little note, the scientist has given the painter a blessing that embodies Pasteur's trinity of highest values: work, family, and the glory of France.

Edelfelt completed the painting before returning home for the summer. Two things should be kept in mind about the state of Pasteur's research at the time the painting was being done since the image was to take on an unexpected new life due to major and unforeseen events in the fall. Salon reviewers, scholars, and viewers in general have tended to see it only in terms of those later events. First, we must remember that to this point in the spring, Pasteur had vaccinated only dogs in his experiments.³³ He had not dared to try saving a person from the threat of rabies, nor had he yet even carried out a plan to test the vaccination first on himself. Second, these experiments were scientific in nature; they were yet not medical or of interest to the general public. That means Edelfelt and Pasteur both believed this was to be a portrait of a scientist at work, an eminent scientist to be sure, but not what it would become—the triumphalist portrait of an acclaimed miracle worker who had changed the course of medicine and was worshipped by thousands of dog-bite victims saved from possible death. In the spring of 1885 when Edelfelt was doing the painting, the matter in the drying bottle was a laboratory reagent. It was not a life-saving therapy. Given the limited progress of Pasteur's rabies inoculation work as of May and June 1885, we have here a testament to his self-confidence, ambition, and willingness to take risks by showcasing the unconfirmed rabies work with the nerve tissue in the drying jar, rather than one of his many established triumphs.

When Edelfelt returned to France from Finland in the fall of 1885, the leading French portraitist, Léon-Joseph-Florentin Bonnat (1833–1922), was just starting his own rendition of Pasteur, a large, expensive portrait commissioned by J. C. Jacobsen, the millionaire brewer from Copenha-

32. Louis Pasteur, *Correspondance 1840–1895*, ed. Pasteur Vallery-Radot, 4 vols. (Paris: B. Grasset, 1940–51), 4:24 (June 26, 1885, to Mlle. Annie Edelfelt). For a photograph of the letter in Pasteur's hand, see Haltia and Sourander, "Albert Edelfeltin Pasteur" (n. 10), 68.

33. In *Private Science of Louis Pasteur* (n. 28), 195–200, Geison reported on two desperate and hitherto unknown attempts to help hospitalized patients possibly suffering from rabies in May and June 1885. Because these were not reported during Pasteur's lifetime and because the second patient died quickly and the diagnosis of the first seems dubious, they do not gainsay the common understanding that the treatment of Joseph Meister in July 1885 was the first human test of the rabies vaccine.

gen, who felt a deep appreciation for Pasteur's work on fermentation. As Edelfelt wrote his mother, "Bonnat is about to have his first sitting in a few days. It angers me very much to have such a competitor. But Pasteur himself said that mine is going to be better." What Edelfelt did not know when he wrote this in late November—and no one else realized either—was that the trickle of dog-bite victims, coming to Pasteur's laboratory for treatment after two cured cases were made public in late October, would turn into a rushing stream and then a flood of patients. By December 15, there were one hundred patients. By February 15, two hundred. And by April 15, two weeks prior to the opening of the Salon of 1886, the total had climbed to nearly seven hundred. The associated wave of rabies publicity made Edelfelt's painting especially exciting both to art critics and to the public, even apart from artistic considerations. 36

Louis Pasteur in the 1886 Salon

By opening day of the Salon on May 1, Bonnat's large portrait was ready for exhibit. It is a studio portrait of Pasteur, facing the viewer, with his five-year-old granddaughter Camille (see Figure 5). There is no hint of a smelly laboratory, sick silk worms, spoiled beer and wine, or animal experiments. The novel element here was using Camille to add more color and a little asymmetry. Although Bonnat was painting this canvas at just the moment when Pasteur's work was in the headlines, the artist intentionally left science out of his picture. Using the approach for which he was both famous and financially successful, he painted the image of a transcendent personality, not a scene or an anecdote.³⁷

Many Salon reviewers in 1886 noticed only the Bonnat and Edelfelt portraits, overlooking a third painting of Pasteur, which was not a portrait, but an interior scene painted by Lucien Laurent-Gsell and titled *Le labo*-

^{34.} November 30, 1885 (Collected Letters [n. 3], 3:93–94, also "Edelfelt Letters 1983," 57).

^{35.} These figures are reported in Hervé Bazin, Vaccination: A History from Lady Montagu to Genetic Engineering (Esher, UK: John Libbey Eurotext Limited, 2011), 266.

^{36.} Although many of the Salon reviews quoted in the next two sections appeared in Richard E. Weisberg's dissertation, the translations and citations have been modified in some cases.

^{37.} Reviewers' comments on the Bonnat portrait are quoted below. For a modern characterization of his approach to portraits, see Julius Kaplan, "Bonnat, Léon," in *Grove Art Online, Oxford Art Online* (Oxford: Oxford University Press), http://www.oxfordartonline.com/subscriber/article/grove/art/T009909 (accessed January 21, 2013).



Figure 5. Photogravure of Leon Bonnat, *Louis Pasteur with Granddaughter* (1886), published as image 155 in *Das neunzehnte Jahrhundert in Bildnissen*, 5 vols. (Berlin: Photographische Gesellschaft, 1898–1901) (Bert Hansen collection).

ratoire de M. Pasteur (see Figure 6).³⁸ Though Pasteur is recognizable, this painting is not a group portrait, but a depiction of the laboratory as a work space, all rigid geometry and fluid light. Pasteur and four assistants are subordinated to the equipment, the furniture, and the light. Laurent-Gsell had been exhibiting at the Salon since 1882. He was related to the Pasteurs as his mother and Pasteur's wife (née Marie Louise Laurent) were first cousins; the newspapers usually called him Pasteur's nephew. In the Salon

38. For a color reproduction, see Bruno Latour, *Pasteur: une science, un style, un siècle* (Paris: Perrin and Institut Pasteur, 1994), 72. The painting has received little scholarly attention. The most complete account seems to be a newsletter article by Yvonne Le Garrec, "Le *Laboratoire de Pasteur* par L. L. Gsell au Musée de Vannes," *Association des Anciens Élèves de l'Institut Pasteur* 46, no. 179 (2004): 56–58, a copy of which was kindly shared by Marie-Annie Avril of La Cohue-Musée des Beaux Arts in Vannes (email, September 9, 2013).

of 1885, Laurent-Gsell had won substantial attention for his large canvas, *L'atelier de Cabanel à l'École des Beaux Arts*, which was purchased at the Salon by the wife of Baron Nathaniel de Rothschild, who donated it two years later to the municipal museum of Morlaix.³⁹ Reviewing the 1886 Salon, critic Paul Leroi enthusiastically praised Laurent-Gsell's newest painting in a leading magazine: "The nephew of the most illustrious savant of our time devoted himself to portraying *The Laboratory of M. Pasteur*, and he did it with a complete success." ⁴⁰ Art critic Joseph Noulens reported that "M. Rothschild . . . was impressed enough to acquire this small canvas, and in his own gallery give it the place that it merited." ⁴¹

Both the Bonnat portrait and the Laurent-Gsell scene received much more commentary in the Parisian press than we can incorporate in a study about Edelfelt's work. Nonetheless, we include material about these two paintings where comparisons reveal something about Edelfelt's work or provide evidence about Pasteur's place in public discourse, such as, for example, these remarks in Noulens's review: "The artist, Pasteur's nephew, was among the first to faithfully reproduce the interior of that laboratory where scientific quasi-miracles were accomplished by his uncle, the most illustrious and the most useful of contemporary scientists."

Pasteur in the Art World: Publicity, Salon Criticism, and Wider Influence

For most of the nineteenth century, the Paris Salon was the single most important exhibition of contemporary art in Continental Europe. ⁴³ The exhibition lasted a month or two in May and June. Each year the French government purchased hundreds of exhibited items, which it placed in the Musée du Luxembourg or in provincial museums and other govern-

- 39. For the purchase, see *Courier de l'art* 5, no. 25 (June 19, 1885): 297; for the donation, see *Courier de l'art* 7, no. 51 (December 23, 1887): 401
 - 40. Paul Leroi, "Salon de 1886," L'art; revue bi-mensuelle illustrée 40 (1886): 251.
- 41. Joseph Noulens, Annuaire du salon. Artistes français et étrangers au Salon de 1886 (Paris: E. Dentu, 1887), 141. The purchaser was Baron Alphonse de Rothschild. The canvas, measuring 91 cm in height without its frame, is hardly small, except compared to the Edelfelt at 158 cm. Later, the critic Paul Leroi helped arrange as a gift from the Rothschilds to the city of Vannes a number of art works that included this painting; see Le Garrec, "Le Laboratoire de Pasteur" (n. 38), 57.
 - 42. Noulens, Annuaire du salon (n. 41), 141.
- 43. The scholarly literature on the Salons and Salon art is enormous. For a concise overview, see Gerald M. Ackerman, "The Glory and Decline of a Great Institution," in *French Salon Paintings from Southern Collections*, ed. Eric M. Zafran (Atlanta: High Museum of Art, 1982), 8–23.



Figure 6. Lucien Laurent-Gsell, *The Laboratory of Louis Pasteur* (1886), oil on canvas, 91 × 78 cm. Collection Musée de Vannes, France (used with permission).

ment buildings. Works exhibited might number as few as two thousand and as many as five thousand. Attendance might run ten thousand visitors a day, for a total of nearly a half million over a typical six-week run. The magnitude of this temporary exhibition created a market for many publications besides the official catalogue. Parisians and the crowds of visitors from afar devoured guidebooks alongside dozens of reviews and hundreds of illustrations in newspapers and magazines.

Salon reviews not only document discussions of style and esthetics, but also illustrate how public understanding of Pasteur's significance was being shaped. We can observe Pasteur working to raise his own stature through art works of the Salon, a process that magnified the acclaim he received directly from his scientific achievements.

Many Salon reviewers commended Bonnat's painting. In the prestigious *Gazette des Beaux Arts*, Alfred de Lostalot commented, "M. Bonnat has painted the illustrious scientist, accompanied by his [grand]-daughter, a young girl dressed in blue, very gracious in the tender and loving pose that Bonnat has most happily found. Pasteur's figure is vigorously raised on a neutral background whose somber tones are enlivened by several clear spaces which give some air to the picture." In a mixed review in *L'artiste*, Charles Ponsonailhe observed that, despite some commendable aspects, the stiff figures lacked vitality.

The portrait of M. Pasteur is very much to the crowd's taste, and with reason. Although it is a strong and powerful painting, with a very intelligent modeling, it errs by presenting to us the picture of a great man rather than that of a real person. . . . His right hand is plunged into the opening of his coat with that banal and theatrical gesture of circus generals. He leans his other hand on his granddaughter's shoulder. But it is undoubtedly with regard to children that Bonnat's paintbrushes are particularly unforgiving with a brutal precision of touch. In sum, the *Pasteur* by M. Bonnat is a member of the Institute painted by his colleague, another member of the Institute.⁴⁵

Some of the critical responses to Bonnat's portrait of Pasteur were prompted by comparison to Edelfelt's piece, which was generally considered far superior. One review said it all in three short sentences: "This portrait is complete. It speaks of the man and his life's work. And it could well be the definitive portrait of Pasteur."

Edelfelt's success was real, but the acclaim was not universal. Various critics judged features differently, especially regarding the sitter's setting and the accourrements. For example, George Lafenestre, in the *Revue des deux mondes*, thought the flasks distracting.

The painting by M. Edelfelt, painted in a lively manner, with an attraction that is quite intimate and familiar, shows M. Pasteur in his laboratory, among flasks and test tubes, in the process of examining an anatomical piece in a flask. Nothing could be more natural, nothing more lifelike. It is exact and it is pleasing but, in truth, the furniture speaks louder than the figure, the physiognomy of the thinker is effaced among the sparkles of the glass pieces, and, in spite of the interest and curiosity that those who come after us will certainly attach to this most minute and detailed report by this Swedish artist, it will not be from him that they will receive Pasteur's definitive image. On the contrary, the figure painted by M. Bonnat has created an austere solitude within undefined

^{44.} Alfred de Lostalot, "Le Salon de 1886: La peinture," *Gazette des Beaux Arts* 33, no. 6 (June 1, 1886): 459.

^{45.} Charles Ponsonailhe, "Salon de 1886: La peinture," L'artiste, June 1886, 440-41.

^{46.} Georges Olmer et Saint-Juirs, *Salon de 1886* (Paris: Goupil, 1886), 77. (Saint-Juirs is a pseudonym of René Delorme.)

surroundings.... Bonnat's portrait is the historic image. M. Edelfelt's is nothing more than an anecdotal picture.⁴⁷

Lafenestre's most pointed criticism of Edelfelt's painting was that it was merely "amusant," an "image anecdotique." In other words, Edelfelt had reduced Pasteur's life to merely one episode, effacing personality—which is essential for a portrait—with the clutter of a history scene. Although he did not like the new direction, Lafenestre was perceptive about the interest Edelfelt and other younger artists showed for including details of modern life, and he traced this impulse to the French landscape painters. ⁴⁸

Albert Wolff, the critic whose favorable notice Edelfelt most desired, fortunately preferred the younger artist's canvas. He called Bonnat's painting "ressemblant" or "true to life," with a pejorative meaning. He described Bonnat as one of the most skillful artists of his day. "Skillful" also carried a negative judgment. Wolff described Edelfelt's canvas as filled with feeling, an important contemporary criterion applied to a painting, indicating superiority to a "mere" photographic likeness.

M. Pasteur has posed two times: for M. Bonnat, who is a master of this genre of portrait, and for a young painter, M. Edelfelt. The portrait by the first artist is certainly *ressemblant*. Pasteur is standing, his hand resting on the shoulder of his granddaughter. The figure is that of a man of science; it is painted by one of the most skillful artists. His considerable talent is indisputable, but this work is soundly beaten by the young man who, with less authority but with more emotion, shows us M. Pasteur intimately and as we had conceived of him before ever having met him.

M. Bonnat has painted the father of the family who, for someone like Pasteur, is his least interesting side. Edelfelt has interviewed the scientist in his laboratory, preoccupied with the problems whose mysteries he is attempting to fathom. He has brought him to life before us, in the process of his thoughts.⁴⁹

Other reviewers found other strengths in Edelfelt's work, even as the critics differed about what kind of portrait the crowd prefers. Paul Leroi wrote in *L'art* that "the best portrait of the Salon was—if one understandably puts aside the work of Delaunay—the one of Pasteur by Albert Edelfelt." Noting that in lesser hands such a portrait might have remained a mere anecdote, he proceeded to a general point.

^{47.} George Lafenestre, "Le salon de 1886: I. La peinture," *Revue des deux mondes* 75 (June 1, 1886): 580–609, quotation on 597–98, emphasis added. The writer is correct in calling Edelfelt "Swedish" since his family was part of the large Swedish-speaking population in Finland.

^{48.} Ibid., 597.

^{49.} Albert Wolff, Figaro-Salon 1886 (Paris: Boussod, Valadon, et Cie., 1886), 22.

^{50.} Leroi, "Salon de 1886," 232.

The excellent Finnish artist, whose work *Divine Service at the Seaside* one can admire in the Luxembourg Museum, shows us the scientist at work. One can see him thinking, an essential merit, which is foreign to the crowd. A brutal likeness, a great bourgeois resemblance, has better chances of attracting the crowd and keeping its attention, but portraits of that type, essentially antiartistic, can never endure. If, by chance, they do obtain it, it is fleeting at best. To M. Edelfelt goes the honor of having created a work which is gripping. His canvas is an historic portrait.⁵¹

Alfred de Lostalot remarked in the *Gazette des beaux arts* that Edelfelt had depicted Pasteur the devoted researcher: "M. Edelfelt's painting shows us Pasteur absorbed in his research, his head inclined. He gazes at a glass bottle in which hangs a bloody scrap of flesh. This is that awful spinal cord of the rabid rabbit which, by the effort of his genius, will be converted into the healing ointment of the most terrible illness."⁵²

Ponsonailhe, who deemed Bonnat's painting stiff and lifeless, as we have seen, praised Edelfelt for having achieved a portrait so filled with life.

M. Edelfelt, in his portrait of M. Pasteur, has realized a work of the highest intelligence. The illustrious scientist is working in his laboratory, which is illuminated by a calm and soft light. . . . The light plays on the professor's face, in the flecks of silver in his grey beard, under the arch of his very developed eyebrows, which shade his lively and piercing gaze, in the fleshy lines of his wise and reflective countenance. This is definitely not the Pasteur of official paintings, a member of the Institute, laureate of all Academies, benefactor of humanity, cast in stone, with the sacred pose of the great man that is common to our public fountains. No, he is the simple and gentle scientist, preeminently good, surprised in the intimacy of his work, of his daily and familiar tasks. ⁵³

On April 24, 1886, a week before the Salon's official opening, the *New York Times* wrote that "the capable young Finnish painter has one of the sensations of the year—"Pasteur dans son Laboratoire," a large and clever work." Edelfelt's sensation in the 1886 Salon was good not only for his reputation, but also for his income. In a letter to his mother, he listed sales to American dealers Knoedler and Hodges of sixty-five hundred and fifty-five hundred francs respectively, along with an estimate of five thousand for the Pasteur portrait and two thousand for a reproduction of it, plus other items, all adding up to thirty-eight thousand francs in income that year. To appreciate those amounts, we note that this

^{51.} Ibid., 232.

^{52.} Lostalot, "Salon de 1886" (n. 44), 459-60.

^{53.} Ponsonailhe, "Salon de 1886" (n. 45), 421-22.

^{54. &}quot;Pictures for the Salon," New York Times, April 24, 1886, 1-2.

^{55.} May 18, 1886 (Collected Letters [n. 3], 3:133).

figure is higher than the twenty-five thousand francs that Louis Pasteur received annually from the French government.⁵⁶ Yet Edelfelt's total is hardly more than the thirty thousand francs that his competitor Bonnat often earned for a single portrait.⁵⁷ The story of another portrait Edelfelt painted a few years later shows that even a less significant work can earn a good fee; but more importantly it confirms how Pasteur could confidently take charge of things in art, just as he did in science. Edelfelt painted a portrait of Rosa Abreu, the wealthy widow of a Cuban planter and wife of Dr. Jacques-Joseph Grancher, the eminent pediatrician who administered all the injections of Pasteur's rabies vaccine. Artist and patron had not discussed a fee, and when the painting was finished Edelfelt was unsure how to handle this uncertainty. He mentioned the situation to Pasteur, who immediately responded in his customary authoritative (and perhaps paternal) manner, saying, "What is this nonsense? You shall have 5,000, no less, as I shall tell him." And that indeed was what Edelfelt was given by Dr. Grancher discretely in an envelope at a dinner—a thousand more than he says he would have asked on his own.⁵⁸

Altogether then, in the Salon of 1886 Louis Pasteur made three appearances: once in the traditional mode of a studio portrait, but also twice as a scientist working in his laboratory.

Pasteur in the Salon of 1887: From Scientist to Healer

In the Salon of 1887 Pasteur bore the mantle of a miracle-working healer in a new canvas exhibited by Laurent-Gsell. In two paintings by the same artist, just a year apart, Pasteur's milieu has changed from research laboratory to treatment clinic. And with that shift came a new kind of public appreciation. Laurent-Gsell's large, busy vaccination scene (250×290)

56. Pasteur's pension was established in 1874 at twelve thousand francs. In 1883, the amount was raised to twenty-five thousand and made transferable upon his death to his wife and then to his children. For pension figures, see Gerald L. Geison, "Louis Pasteur," in *Dictionary of Scientific Biography*, vol. 10 (New York: Scribner, 1974), 350–416, 352. In "Pasteur: A Sketch in Bold Strokes," in *World's Debt to Pasteur*, ed. Hilary Koprowski and Stanley A. Plotkin (New York: Alan R. Liss, 1985), 5–27, Geison explained (15) that twenty-five thousand francs was roughly double what full professors in Paris were making and ten times the income of a salesclerk in a department store.

57. Kaplan, "Bonnat, Léon" (n. 37).

58. August 13, 1991 (Collected Letters [n. 3], 4:69–70). We have not located this portrait, which is listed but not illustrated in Hintze, Albert Edelfelt (n. 15) as no. 596, 3:123. It is not among the illustrations in a biography by Jacques Roussillat, Un patron des hôpitaux de Paris à la Belle Epoque: la vie de Joseph Grancher (Guéret: Société des Sciences naturelles et archéologique de la Cruese, 1989).

cm) in Figure 7 was a strong contrast to his earlier painting of a quiet chemical laboratory exhibited in the 1886 Salon. The chemist is seen checking patients' names against a list. His figure is large and paired with a white-robed Berber holding a walking stick. Several elements of the arrangement draw upon the imagery in traditional religious scenes, such as the Madonna and Child, the adoration of the shepherds, and even Jesus's circumcision.

One modern commentator describes this painting's Pasteur as a "secular saint of modern science." Many salonniers gave it warm praise. In *L'artiste* Charles Ponsonailhe wrote, "M. Laurent-Gsell, led only by his love of art and of contemporaneity, has braved M. Pasteur's clients and captured by surprise the spectacle in this clinic of highest interest. . . . Previously, I had reproached M. Laurent-Gsell for a lack of originality and artistic imagination. . . . But now Laurent-Gsell has developed, and his observation is well-grounded. . . . Only the sick child can be faulted for its old-fashioned prettiness." Earlier, Ponsonailhe had observed that "subjects touching on medical science have drawn particular attention from visitors to the Salon this year," and cited the paintings by Laurent-Gsell, Henri Gervex, and André Brouillet "that reproduce some scenes of hospitals or the clinic, some experiments bringing up the most recent discoveries of this art" (see Figures 8 and 9). 61

Like Ponsonailhe, Paul Leroi called attention to the artist's improvement, announcing in *L'art*, "This year M. Lucien Laurent-Gsell has taken a giant step." He commented further,

His intelligent composition . . . shows us a young mother having her little daughter vaccinated against rabies. Also present are Russians, Arabs, and others, and M. Pasteur, the uncle of the painter, who has marvelously rendered the features and gestures of the illustrious savant. . . . Overall, it is very much alive. The tone is accurate. The shapes are nicely indicated though perhaps a little superficially, something expected from such a young man. In any case, this has not prevented M. Lucien Laurent-Gsell from having his signature on one of the best works at the Salon, one which will surely be remembered. 62

Other Salon reviewers, including George Lafenestre and Albert Wolff, likewise highlighted the novelty of medical advance as a subject of contemporary scenes painted on the grand scale of traditional history paint-

^{59.} Sonia Banting, "Pasteur, saint laïc de la science moderne," in *Focus sur des oeuvres*, (Centre national des arts plastiques, last updated August 7, 2014), http://www.cnap.fr/pasteur-saint-la%C3%AFc-de-la-science-moderne.

^{60.} Charles Ponsonailhe, "Le salon: peinture III," L'artiste, August 1887, 96-122, at 113.

^{61.} Charles Ponsonailhe, "Le salon: peinture I," L'artiste, June 1887, 411–45, at 444.

^{62.} Paul Leroi, "Salon de 1887," L'art; revue bi-mensuelle illustrée 42 (1887): 178.



Figure 7. Lithograph by F. Pirodon (published by E. Desjobert, Paris) of Lucien Laurent-Gsell, *La vaccine de la rage au laboratoire de M. Pasteur* (1887) (used courtesy of the Wellcome Library, London, under a Creative Commons license). The original canvas on public display at the University of Strasbourg bears this title on its frame: *Le laboratoire de Pasteur*. Early salon catalogues mistakenly list it as *Le premier septembre*. Banting, "Pasteur, saint laïc de la science moderne" (n. 59), cites it as *La vaccine de la rage*.

ings. Lafenestre, like Ponsonailhe, grouped Laurent-Gsell's painting with Gervex's *Avant l'opération* and Brouillet's *Leçon clinique à la Salpêtrière*. Lafenestre judged Laurent-Gsell's arrangement of the number of people superior to Brouillet's composition. "The people, less numerous and more attentive, are more seriously interested in the action than those in M. Brouillet's work. They therefore interest us more."



Figure 8. Photogravure by Goupil and Co. (Paris, distributed by D. Appleton and Co., New York) of Andrè Brouillet, *A Clinical Lecture by Charcot* (1887) (Bert Hansen collection).



Figure 9. Photogravure by Gebbie and Husson Co. Ltd. (Paris Exposition, 1889) of Henri Gervex, *Before the Operation* (1887), Clements C. Fry Collection, Yale University, Harvey Cushing/John Hay Whitney Medical Library (used with permission).

Doctors at Work: The New-Style Portraits

For Wolff, Laurent-Gsell's rabies painting marked an important step in the creation of a new iconography for doctor portraits. Like other writers, he analyzed the painting together with the medical scenes by Brouillet and Gervex. He declared all three "modern" portraits. "For the same approach, if on a more modest level, I cite the work of a young man of the future, M. Laurent-Gsell, who brings us into Pasteur's clinic, where a child is inoculated for rabies. These canvases embody the completely modern trend of our portraitists."

Following upon such successes in the 1886 and 1887 Salons, a number of other artists created "at work" portraits of doctors and scientists in this new mode. ⁶⁶ Important examples of the new iconography include Léon Lhermitte in 1889, Claude Bernard and Professor Sainte-Claire Deville, Edouard Bisson in 1890, Après l'opération de la lithotritie (Dr. Guyon); Jules Adler in 1892, Transfusion du sang de chèvre par le docteur Simon Bernheim; André Brouillet in 1895, Le vaccin de croup; and Marguerite Delorme in 1897, Professor Edmond Delorme demonstrating pulmonary decortication to students at Val de Grâce in 1894. ⁶⁷

When the Salon critics highlighted the works by Edelfelt, Laurent-Gsell, Brouillet, and Gervex as "modern" portraits in contrast to Bonnat's work, they were emphasizing the novelty of bringing frank scenes of science and medical activity into the Salon. The commentators well knew that

- 64. Key literature on the Brouillet image includes J. L. Signoret, "Une leçon clinique à la Salpêtrière (1887) par André Brouillet," Revue neurologique 139, no. 12 (1983): 687–701, and Christopher G. Goetz, Michel Bonduelle, and Toby Gelfand, Charcot: Constructing Neurology (New York: Oxford University Press, 1995). Mary Hunter has recently examined Gervex's painting Before the Operation in two recent articles; see "Medical Masculinity and Sleeping Beauties: Identity and Sexuality in Henri Gervex's Avant l'opération," in Gender Scripts in Medicine and Narrative, ed. Marcelline Block and Angela Laflen (Newcastle upon Tyne: Cambridge Scholars, 2010), 32–63, and "Effroyable Réalisme': Wax, Femininity and the Madness of Realist Fantasies," RACAR 33, nos. 1–2 (2008): 43–58.
 - 65. Albert Wolff, Figaro-Salon 1887 (Paris: Boussod, Valadon, et Cie., 1887), 40.
- 66. This interpretation was established in Richard E. Weisberg's 1995 dissertation ("Representation of Doctors," n. 10), using phrasings like "the at-work portrait." Since then, the phrase "milieu portrait" has come into wider use, especially in Nordic scholarship. This label carries much of the same meaning, although it is more inclusive since a person can be in a characteristic setting without doing work.
- 67. We intend to discuss the significance of these portraits in a separate article, along with the paintings of famous doctors from the past that resembled the new-style at-work portraits. These latter were a new kind of history painting, of physicians, not kings or military leaders, as had been the tradition in that genre, and they included such figures as Paré, Vesalius, Aselli, Jenner, Pinel, and Laennec.

"modern portraits" in general, and especially of cultural figures, were not brand new. The milieu portrait had started to become prominent about twenty years earlier. Hence our argument that Edelfelt's portrait of Pasteur was a major, new force in reshaping the image of doctors and scientists (something recognized at the time by Salon critics) does not imply that Edelfelt invented the "at work" or milieu portrait. Nor do we intend to suggest that his work was independent of the wider transition to modern portraiture in France.

During the 1880s Edelfelt's development took advantage of two increasingly frequent practices in French painting of the mid- and later nineteenth century: milieu portraits and scenes of anonymous ordinary people painted on oversized canvases, at the scale of traditional history paintings. In the first approach naturalistic portraiture put greater emphasis on personality and immediacy than on social status, often through the use of everyday environment. The portraits of *Charles Baudelaire* by Gustave Courbet (ca. 1849) and *Emile Zola* by Edouard Manet (1868) are familiar examples.⁶⁸ Less familiar, though more emblematic, is Degas's portrait of Edmond Duranty (1879). There are numerous realist portraits of artists in their studios from the 1870s and 1880s.⁶⁹ Edelfelt's own portrait of his close friend Dagnan-Bouveret (1881) working at his easel is a good example. And recall too that before Laurent-Gsell painted Pasteur's laboratory and then Pasteur's clinic, he had painted a scene of the students working in Cabanel's atelier, a canvas that was exhibited in the Salon of 1885 and purchased by Baroness Rothschild (as noted above). As illustrations of the second development, one may call to mind a famous canvas like Degas's A Cotton Office in New Orleans (1873), as well as the era's many large canvases of peasants working in the fields as painted by Jules Bastien-Lepage, Léon Lhermitte, Dagnan-Bouveret, and many others. Edelfelt, like many others, chose to portray ordinary people in their regular settings (though as types, not as individual portraits, no matter how closely these artists worked with models and photographs). Examples include Edelfelt's prize-winning Service divin au bord de la mer and his earlier painting, Le convoi d'un enfant, through which he first became acquainted with Jean-Baptiste Pasteur.

^{68.} Heather McPherson, *The Modern Portrait in Nineteenth-Century France* (Cambridge: Cambridge University Press, 2001).

^{69.} Bridget Alsdorf, Fellow Men: Fantin-Latour and the Problem of the Group in Nineteenth-Century French Painting (Princeton, N.J.: Princeton University Press, 2012); and Gabriel Weisberg, Redefining Genre: French and American Painting, 1850–1900 (Washington, D.C.: Trust for Museum Exhibitions, 1995). See also Weisberg's Against the Modern (n. 12) and Illusions of Reality (n. 12).

The doctor-at-work portraits that were noticed as a cluster by the critics and the public in the Salons of 1886 and 1887 were seen as new because they were new.⁷⁰ To appreciate the novelty and to prevent misinterpretation, it may be helpful to distinguish the new portraits from other portrayals that might mistakenly be grouped with them. We need to remind ourselves that these 1880s compositions are portraits—even when they include a full setting and other people—since they celebrate known

70. It may be helpful to some readers if we place this claim in the context of scholarship on medical and scientific portraiture (beyond the works already cited). Art historians have a long-standing interest in portraiture including a few prominent images of physicians and scientists (most notably Rembrandt's Tulp, and David's Lavoisier), but they have had not singled out the scientist portrait as a category with a special history and—if we are correct—a key turning point. The literature on portraiture by art historians is large, but useful entry points include Marianna Jenkins, *The State Portrait: Its Origin and Evolution* (New York: College Art Association, 1947) on the *portrait d'apparat*; Roy C. Strong, Brian Allen, et al., *The British Portrait, 1660–1960* (Woodbridge, Suffolk: Antique Collectors' Club, 1991); Joanna Woodall, ed., *Portraiture: Facing the Subject* (Manchester: Manchester University Press, 1997). See also McPherson, *Modern Portrait* (n. 68) and Alsdorf, *Fellow Men* (n. 69).

Curators, on the other hand, whether of medical institutions or of special exhibits, have catalogued and analyzed numerous examples. For major medical collections in Philadelphia and London, see Berkowitz, College of Physicians (n. 5) and Wolstenholme and Piper, Royal College of Physicians (n. 5). For two special exhibitions of British paintings, see Hackmann, Apples to Atoms (n. 7) and Jordanova, Defining Features (n. 7). An early exhibit by William H. Gerdts, The Art of Healing: Medicine and Science in American Art (Birmingham, Ala.: Birmingham Museum of Art, 1981) was remarkably comprehensive. Another pioneering exhibit catalogue with interpretive essays is Brandon Brame Fortune and Deborah J. Warner, Franklin and His Friends: Portraying the Man of Science in Eighteenth-Century America (Philadelphia: University of Pennsylvania Press, 1999). Hansen examined American popular imagery at length in Picturing Medical Progress from Pasteur to Polio (n. 8).

Highly illustrated books about medicine in art form a perennial publishing genre. They do include portraits, but they tend to repeat the same familiar examples, and they only rarely offer analysis or new interpretation. Examples include Julie Anderson, Emm Barnes, and Emma Shackleton, *The Art of Medicine: Over 2,000 Years of Images and Imagination* (Chicago: University of Chicago Press, 2011); Giorgio Bordin and Laura Polo D'Ambrosio, *Medicine in Art* (Los Angeles: J. Paul Getty Museum, 2010); Ann G. Carmichael and Richard M. Ratzan, eds., *Medicine: A Treasury of Art and Literature* (New York: Beaux Arts, 1991); Alan E. H. Emery and Marcia L. H. Emery, *Medicine and Art* (London: Royal Society of Medicine Press, 2003); *idem, Surgical and Medical Treatment in Art* (Royal Society of Medicine Press, 2006); Albert S. Lyons and R. Joseph Petrucelli, II, *Medicine: An Illustrated History* (New York: Abrams, 1978); André Pecker, *La Médecine à Paris du xiiie au xxe siècle* (Paris: Editions Hervas, 1984); Jean-Charles Sournia, *The Illustrated History of Medicine* (London: Harold Starke Publishers, 1992).

None of the works mentioned in this note attends seriously to the new imagery of doctors at work that emerged in France around 1880, a novelty that had been richly discussed by art critics at the time. A rare hint of an awareness of change appeared in Jordanova's observation (*Defining Features*, n. 7) that a watercolor of Faraday in his laboratory "is noteworthy because there had been few depictions of men of science at work" (39).

individuals. As such, they are entirely distinct from anonymous, generic physicians and caregivers in contemporary paintings, such as the man bandaging a peasant's injury in *The Accident* (1879) by Dagnan-Bouveret or the slightly later and overly sentimental, but ever-popular, large-scale British genre scene, *The Doctor* (1891) by Luke Fildes.⁷¹

The "modern portraits" are likewise distinct from the many seventeenth- and eighteenth-century genre paintings that showed a generic doctor or alchemist, not a man with a name and reputation. Our observation of the novelty of at-work portraits of scientists in Paris in the 1880s does not ignore three fascinating science-themed canvases of the mid-eighteenth century by Joseph Wright of Derby. These were storytelling genre scenes, not portraits of individuals. These paintings depicted only types ("a philosopher," "the alchemist"). 72 As such, they are not counterexamples to the claim that large at-work portraits of scientists and physicians first came to prominence in France in the 1880s.⁷³ One final clarification may be helpful for any readers thinking of Rembrandt's now famous Anatomy Lesson of Dr. Tulp (1632).74 How "modern" could these naturalistic portraits of doctors really be in light of such a now-familiar precedent as that? The visual similarity is real, especially between the Rembrandt and the Gervex, but the historical connection is not. For about two and a half centuries after Rembrandt, there seem to have been no significant single or group portraits of specific physicians or natural scientists at work.

Recognition by the French State and the International Art World

The critical reaction to Edelfelt's work must have pleased Pasteur with such flattering words as "the simple and gentle scientist, preeminently

- 71. Although Fildes's figure is a clinician, not a scientist, and the painting is a large genre scene, not a portrait, it is hard not to wonder whether the doctor's intense, downward, contemplative gaze might not be a reference to Edelfelt's Pasteur.
- 72. The relevant genre paintings by Wright are A Philosopher Lecturing on the Orrery (ca. 1766), An Experiment on a Bird in the Air Pump (1768), and The Alchemist Discovering Phosphorus (1771). He did paint many portraits. On "serious genre" painting prior to the nineteenth century, see Ellis Waterhouse, Painting in Britain, 1530–1790, 5th ed. (New Haven: Yale University Press, 1994), 285–86.
- 73. One further famous portrait should also be excluded as a precedent since, while it is a formal portrait that includes pieces of chemical apparatus as accoutrements, its subjects are posed in an elegant parlor and they are definitely not shown at work: Jacques-Louis David's Antoine-Laurent Lavoisier and His Wife (1788).
- 74. On the painting's meaning in its own era, see William Schupbach, *The Paradox of Rembrandt's "Anatomy of Dr. Tulp"* (London: Wellcome Institute for the History of Medicine, 1982).

good, surprised in the intimacy of his work." But the chemist did not sit idly by, basking in the personal glory. In the art world, as in science, Pasteur knew how to employ his prestige to benefit himself and his friends. Early on the morning of June 1, only halfway through the Salon's run, René Goblet, the minister of public instruction in France, came to breakfast at Pasteur's house to discuss honoring Edelfelt with the French Legion of Honor.⁷⁵

In this era, it was customary for the French government to buy outstanding works in each Salon, and Edelfelt was approached about such a sale. Edelfelt conferred with Pasteur and his son about his plan to make a copy of the painting for them. After initially agreeing, Pasteur became hesitant, worrying about the quality of the replica. Edelfelt decided he would not sell his painting until a completed copy was satisfactory to Pasteur. After considerable effort, it was done to everyone's satisfaction; and the Pasteurs held onto their copy. ⁷⁶ The original canvas was frequently exhibited and reproduced. The state held the painting first in the Luxembourg Palace, then at the Sorbonne, then in the Jeu de Paume, and finally in the collections at Versailles for much of the twentieth century.⁷⁷ Pasteur's copy became part of the Musée Pasteur, created in the family apartment in the Pasteur Institute after Madame Pasteur's death. The institute exhibited the portrait with pride, but in time lost track of the fact that this was a copy. In Paris, this was regarded as the only version until the early 1980s, when Patrick Sourander, a neuropathology professor visiting from Sweden, observed that the painting lacked the artist's signature, which had been recorded for the original canvas in Hintze's Swedish-language catalogue raisonné. Subsequent investigation by Emilie Michaud, then curator of the Pasteur Museum, enabled the two of them to visit Versailles together and observe the original canvas in storage there. 78 Today, that canvas has an honored place in the Musée d'Orsay in Paris.

French newspapers and magazines were printing reproductions of the painting as early as June 1886. Even an incomplete list of its appearances in U.S. periodicals (compiled by Hansen as part of another project) will suggest that the image quickly became familiar and remained so for decades: *Harper's Bazaar* and *Collier's Once a Week* in 1890, *Frank Leslie's Illustrated Weekly* and *McClure's Magazine* in 1893, *Great Men and Famous*

^{75.} June 6, 1886 (Collected Letters [n. 3], 3:140-41, also "Edelfelt Letters 1983," 60).

^{76.} Sourander, "Edelfelts berömda Pasteurporträtt" (n. 1).

^{77.} Museum owners, exhibitions, and reproductions are listed Hintze, *Albert Edelfelt* (n. 15), 3:73 (cat. no. 328).

^{78.} Sourander, "Edelfelts berömda Pasteurporträtt" (n. 1), 149-54.

Women, a portfolio series by Selmar Hess in 1894, Harper's Weekly and Review of Reviews in 1895. By 1896 it was being used commercially to advertise a disinfectant. Scientific American reproduced the painting in 1911. Bulletin readers may well have seen it as one of the color prints in a series of chemical and alchemical art widely distributed by the Fisher Chemical Company in Pittsburgh starting in 1934 or on the dust jacket of the 1995 book by Gerald L. Geison, The Private Science of Louis Pasteur.

Filial Bonds

After its appearance in 1885, the painting succeeded in keeping a particular image of Louis Pasteur in people's minds. The artist flourished with a major international career until his death in 1905. Pasteur, however, soon retired from laboratory research, gradually growing weaker over the years. A stroke in 1887 compounded the effects of one he had suffered in 1868. Another occurred in late 1894, after which his decline was severe. The letters to Edelfelt's mother allow us to observe the emotional side of a man who always presented himself publicly in a manner that was formal—sometimes even chilly. One such letter dates from April 1895, about five months before Pasteur's death. "Last Sunday we were at the Pasteurs. It was terribly sad to see him. He was almost completely paralyzed, and talking requires a great effort. But the intellect has remained intact. One day he was sitting with his son and said, with tears in his eyes: 'Useless, I am now useless.' When he saw us, he wanted me to sit in front of him and started crying loud when we had talked about his friendship with me."⁷⁹

Even acknowledging that expressions of condolence may be conventional and exaggerated, we believe that notes exchanged between Edelfelt and Pasteur's son accurately record the bonds of affection that the artist and the scientist shared. On October 2, 1895, just a few days after Pasteur's death, Edelfelt wrote to Jean-Baptiste as follows: "I well knew what your father—whom I have admired, respected, and loved for fifteen years—meant to me, but only now has it become clear for me what limitless space he occupied in my heart. I cried for him as I cried for my own father, and the world seems empty to me now when he is not there anymore." Jean-Baptiste wrote the painter in return, "He truly did love you, and such a pleasure it was for him to meet you and to hear you talk about your work! Those beautiful days have gone. We are not going to see his apostolic look any more. We are not going to hear his voice, which we

remember so well. But you have painted him, for centuries at least, on that delightful canvas that made him so proud, even more perhaps than you. I have already been a few times to study it, talking to him through it."81

Edelfelt's painting of Pasteur in his laboratory, which was so successful in its naturalism that Jean-Baptiste conversed with it, has retained the power to engage viewers. It provides the theatrical illusion that we might be standing nearby watching Louis Pasteur, who pays us no attention because of his deep concentration. It differs from the many portraits in which the subject looks out of the frame into the viewer's eyes and also from those that present themselves to the viewer as paintings, not as living scenes. As we have argued, the strength of Edelfelt's painting arose in part out of the active collaboration of the artist with his unusual subject, a chemist with a lifelong passion for the fine arts. The initial success and the continuing popularity of "that delightful canvas that made him so proud" changed both men's careers and helped to establish a new way of portraying scientific genius.



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81. Letter of Jean-Baptiste Pasteur, October 15, 1895, as quoted in Finnish in "Edelfelt Letters 1983," 62.