CHAPTER FIVE - LOUIS PASTEUR AND THE SALON

The Salon of 1886 marks a turning point in the way artists portrayed living French doctors and surgeons. The three portraits of Louis Pasteur exhibited at that year's Salon gave those who visited it the opportunity to see both the conventional and the new style of medical portraits. Reviews that many had already read noted the change and alerted them to compare the paintings for themselves. Artists as well made the comparison and by the following year's Salon (as we have already seen in Gervex's painting of Dr. Pean and Brouillet's of Jean-Martin Charcot) they had begun to show their subjects at work in their hospital or clinical setting. At the Salon of 1887, Pasteur had "moved" out of his laboratory and was shown in his clinic attending to the patients being treated by his medical staff.

The Salon opened on Saturday, May 1 1886 and closed on Wednesday, June 30. It was open every day of the week from eight in the morning until six in the evening, except on Mondays when it only opened in the afternoons and on Sundays when the doors closed an hour earlier. With the exception of opening day when the admission charge was five francs, tickets in the morning cost two francs with half price admissions

available after twelve noon. On Fridays, the admission was two francs all day and on Sundays, the price was one franc in the morning and free in the afternoons. Thus, although one could avoid the more crowded times by visiting in the mornings, the relatively inexpensive ticket prices and the number of hours it was open, made the Salon widely accessible to Parisians and citizens of the neighboring towns. Despite these large attendance figures, at least one critic complained that the small number of free half-days prevented most Parisians from visiting the Salon, or, at best, permitting them to go only when the crowds were too thick to see much of anything. "C'est peu," argued Paul Lambert in LA NATION, "pour une population de trois million d'habitants à qui le Palais de l'Industrie appartient tout comme à d'autres; mais la Societé [des Artistes Français] trouve que c'est bien assez pour des gens qui ne payent pas. Cette manière d'administrer le Salon est tout simplement honteuse." [1] Lambert accused Tony Robert-Fleury of being more concerned with administration of the Artists' Society than with his own painting and especially of having turned the Salon into a huge bazaar. [2] The 1886 Salon did earn quite a bit of money. In addition to receipts of 316,504 francs, the Salon took in 11,200

francs at its buffet, 18,327 francs from catalogue sales and 4,204 francs from photographic reproductions. An idea of what Sundays were like can be seen in an article from 1884, in which William Sharp, correspondent for London's ART JOURNAL noted that Sunday afternoons were extremely crowded at the Salon, especially on the first weekend. "On the first Sunday in May, when the Salon is open free, there entered up to 2 o'clock, 15,000; to 3 o'clock, 24,000; to 5 o'clock, 40,485 persons. In addition there were 2,000 who paid a franc each for admission between 8 and 10 o'clock." [3]

Two thousand four hundred eighty-eight paintings were exhibited in thirty-three rooms into which the Palais De L'Industrie on the Champs-Elysees had been divided. Each artist was permitted to submit two oils to the selection jury. The election of the forty-member Jury d'Admissions and of Awards, took place on Thursday, March 18. Although the election was open to all members of the Societé des Artistes Français, only the most influential members of the art establishment won places on it. Léon Bonnat received the most votes, 1,253, followed by Lefebvre (1,201), J.-P. Laurens (1,199), Harpignies (1,193), Henner (1,180), Tony Robert-Fleury, (1,109), Puvis de

Chavannes (1,101), Bouguerau (1,084) and Cabanel (1,042). Their former students were also elected to the jury: Roll (940), Duez (931), Jules Breton (885), Cormon (797) and Gervex (787). Benjamin-Constant (982), Yon (831), Detaille (820) and Carolus-Duran (784) were also among the forty artists who received the most votes. Feyen-Perrin (509), in forty-first place, was called when La Lanne (570) resigned his seat. [4] The jury could give each painting a rating number, a "numero de placement," - one, two or three - which determined its placement on the wall. Rooms were assigned to letters by lottery.

Many critics began their reviews with the standard formula that the Salon this year was generally of the same quality as those of previous years. "The Salon of 1886," wrote Alfred de Lostalot in the GAZETTE DES BEAUX-ARTS, "is neither better nor worse than that of 1885." [5] Some reviewers had even written that visitors were not likely to encounter anything that was new or remarkable. "French painters do not show us anything new this year. For the most part, they are marching in place." [6] Other reviewers, however, disagreed. They noted that some artists had indeed sent innovative works that year. They pointed particularly to several portraitists who, they claimed,

had begun to paint their subjects while in their everyday milieu.

Although perhaps few in number, the new style portraits were believed by contemporary reviewers sure to be influential. In the journal L'ARTISTE, Charles Ponsonailhe wrote that "In the 1886 Salon there are more than just indications of an extremely important artistic evolution. Even separating out an infinite number of others which are less important though of the same family, they clearly affirm the new path on which modern art has engaged itself."[7] To illustrate his point, Ponsonailhe cited four paintings by three artists which he described as the most important of this new direction. Two were by Roll, one by Besnard and one which will be discussed in this chapter, LE PORTRAIT DE M. PASTEUR by Albert Edelfelt. [8]

The most important and well-known scientist in France in 1886 was unquestionably Louis Pasteur. According to Theodore Zeldin, a poll taken among French students in the 1960s asked, "who in history had done the most good to France. Forty-eight percent said Pasteur, twenty percent said St. Louis, twelve percent said Napoleon, nine percent said De Gaulle, four percent said Colbert, two percent said Louis XIV, one

percent siad Gambetta and one percent said Robespierre." [9] Gerald Geison has noted that in the 1880s, Pasteur's work accounted for ten per cent of all government expenditures on scientific research. [10] In the early part of the decade, Pasteur's spectacular successes with anthrax and then rabies vaccine were the culmination of a career that, in the words of one biographer, had never suffered a single setback [11]. It is not surprising therefore that Pasteur's portrait would have appeared more than once at the Salon. "Le savant le plus populaire de notre pays, M. Pasteur,...a ete represente au Salon plusieurs fois, notamment par M. Bonnat et par M. Edelfelt." [12] In addition to these two, a third portrait of Pasteur by his young nephew, the artist Lucien Laurent-Gsell that Lafenestre failed to mention was also exhibited. Lafenestre was not the only critic who overlooked Laurent-Gsell's painting. George Olmer, for example, wrote "Like the yearly revues at the Varietes, the Salon makes sacrifices to the current news and always seems to burn some incense in honor of the men of the day. We therefore expected to see at it a portrait of Monsieur Pasteur. Instead, we got two.1" [13]
Alfred de Lostalot, reviewer for the GAZETTE DES BEAUX ARTS, also omitted Laurent-Gsell's portrait. He wrote

that "M. Pasteur a servi de modele a deux pentres differents." [14] De Bouartel, salonnier for LA NOUVELLE REVUE, also mentioned only the portraits of Pasteur by Bonnat and Edelfelt. [15] Laurent-Gsell's portrait, the LABORATOIRE DE M. PASTEUR was a small work, referred to by some reviewers as a "tableautin." In addition, it had been "skied" by the Salon jury, that is, it had been hung at the highest level, nearly out of sight. It was perhaps for these two reasons, rather than any negative reaction, that caused most critics to fail to note the painting.

These three portraits of Pasteur at a single Salon allowed the public, the critics, doctors and other artists to contrast the older, conventional style of portrait with portraits of the same person painted by two younger artists. The paintings by both Edelfelt and Laurent-Gsell celebrated Pasteur as a hero of science. Bonnat's made no reference to his scientific work.

Pasteur, it is true, was not a doctor, and had even alluded several times to the fact that he was not a medical man, especially when he was being critical of doctors. "If I had the honor of being a surgeon, I would never introduce any instrument whatsoever into the human body witout having first

FIGURE 125 - LOUIS BONNAT PORTRAIT OF PASTEUR

FIGURE 126 - ALBERT EDELFELT PASTEUR

FIGURE 127 - LUCIEN LAURENT-GSELL LABORATOIRE DE MONSIEUR PASTEUR (STUDY)

passed it through a naked flame, and then rapidly cooling it," [16] he chided the medical profession. But by 1886, Pasteur was clearly a leading figure in the French medical community. Since the late 1870s his work consisted entirely of research on diseases (chicken cholera, swine erysipelas and anthrax at first, followed by human illnesses, cholera, yellow fever and rabies). In his own lifetime, medicine had been described as "avant et après Pasteur." [17] Recognition by the medical community had certainly been accomplished with his election to the Academy of Medicine in 1873. Pasteur represented France at several international medical conventions including important meetings held in London, Copenhagen, and Geneva. By 1886, the French public as well as French doctors considered Pasteur as much a part of the medical world as of the world of French science.

Pasteur was devoted to his work. His wife even referred to the fact that he was always up early in the morning and did not return home from his laboratory until late in the evening. [19] According to Geison, "surely a major factor in his success...was his awesome capacity for work." [20] He did not seem to have many interests outside his work. He did enjoy a game of billiards at his country home in Arbois [21]

but did not participate to any great extent in the varied cultural life Paris offered. In a letter he wrote to Jules Lemaitre in 1888, Pasteur said, "Mes impressions de theatre sont rares. Je regrette souvent d'etre ignorant de tant de pieces celebres du repertoire moderne." [22] His only interest outside his work seems to have been art.

Pasteur's interest in painting was lifelong. The pastels he had done as a teenager in Arbois and as a student at the College of Besançon are not only evidence of his talent but of his early view of what a portrait should look like. [23] It has been pointed out that Pasteur's ability to observe deeply was a element common to both art and science. [24]

In the 1860s, Pasteur taught a course at the École Des Beaux-Arts on the chemistry of oil painting. The program at the Ecole suited his conservative artistic taste, and his friends in the art-world were acedemically trained. Perhaps his closest painter friend was Jean-Jacques Henner. Henner was from Alsace and the connection to the "lost provinces" meant a great deal to Pasteur. It was Henner's painting of "The Young Alsatian Girl Who Waits" that Pasteur always kept on the wall of his study. Pasteur got to know Henner when he was painting a portrait of Pasteur's

daughter, Marie-Louise. Pasteur wrote to Duclaux in June, 1876: "The portrait of Louise by Henner will be very good to judge by the results of the first six sittings. Tomorrow the seventh. He has painted it with great taste. He his a charming man, gentle, modest, very fine and distinguished. It always pleases me to accompany my dear girl. I hope that later on he will do the portraits for Jeanne and Jean-Baptiste." [25] Pasteur used similar words to praise Jeanne's portrait directly to Henner: "goute, tres admire,...j'en suis on ne peut plus satisfait." [26] Pasteur often invited Henner to dinner. These dinners were less formal occasions for Pasteur, a chance for him to be away from the daily encounters with science and discuss his other love, art. In an invitation of November, 1879, Pasteur wrote that dinner would be "sans ceremonie." [28] On May 21, 1880, Pasteur wrote, "Mon cher Henner, Voulez-vous nous faire un grand plaisir? Venez diner rue d'Ulm 45 le 31 mai a 7h. Paul Dubois, je l'espere, sera des notres." [29] Dubois had done a "superb" bust of Henner which Henner kept on display in his studio in Montmartre. "L'atelier est vaste et tout bonde de choses d'art, vases, tapisseries, bronzes, mais pas de luxe affecte." [30] At the time of this dinner, Dubois' statue of

Pasteur was being exhibited at the Salon, and presumably the Salon would be a topic of dinner conversation. In his letter, Pasteur diplomatically made it a point to praise the paintings that Henner had sent to the Salon. "Qu'elle est admirable votre tete endormie, et votre nymphe a la fontaine est-elle assez savoureuse et charmante dans sa timidite craintive." [31] Henner was among those special friends invited to stay with the Pasteur family at their country home in Arbois [32] Henner would also accompany the Pasteur family on their Salon visits. "My wife and daughter and I accept (my son and his wife are still in the country for the Pentecost holidy) with great pleasure your offer for a visit to the Salon next week. If you wish, we will meet you on Thursday morning at nine o'clock in the square facing the front of the Palais de L'Industrie. We having been following with great interest the accounts of the Salon and we congratulate you for the unanimous praise your two beautiful works have received." [33] Among the critics Pasteur admired most were Charles Blanc (a personal friend) and Jules Claretie. "Mon fils," Pasteur wrote to Henner, "m'a fait grand plaisir en me donnant a son arrivée le jugement de M. Claretie, un critique que j'aime pour les jugements si favorables et si vrais qu'il s'est

toujours plu à porter sur vous." [34] When Henner's work was not well received by the Salon officials, Pasteur wrote to his friend, "Blessé comme tant d'autres de l'injustice du jury à votre egard, je vous addresse mes felicitations les plus cordials." [35] Henner's MADELEINE did not win a first place award at the Salon of 1883, and Pasteur blamed it on the jury's having been elected democratically, by the universal suffrage enjoyed by all the members of the Societe des Artistes Français, which "perdra donc tout." [36] Despite the wide franchise, the jury that got elected was composed of the art "establishment." Henner himself had won fifth place with nearly 2,000 votes. The comment tells us more, perhaps, about Pasteur's views on democracy in general than about his opinions of the Jury. In a letter a few years later to the Inspector-General of Roads and Bridges at Arbois about a certain dispute in municipal politics (quite forgotten, according to Pasteur Vallery-Radot), Pasteur wrote that the matter would be laughable except unfortunately, it was "one of the signs of the tyranny and the coarseness of vulgar democracy when it believes itself to be triumphant. Poor country! It is sick indeed! The republics of antiquity have all perished because of envy and jealousy. The most vile souls have

found popular favor because they could not be distinguished from them by any superior qualities." [37]

The warm relations between Henner and Pasteur lasted for the rest of their lives and when Pasteur's wife informed him that Henner had been elected to the Academie Des Beaux-Arts, Pasteur immediately sent his congratulations. "Bravo au nom de tous. J'en avais le presentement." [38]

Portraits of Pasteur had appeared at several Salons before 1886. Jean Joseph Peraud's bust of Pasteur was shown at the 1876 Salon. Peraud had been both artist and friend to Pasteur. When he died in November, 1876, Pasteur and a mutual friend, the artist William Bougereau, were at his bedside. Even at Peraud's death, Pasteur thought of the art-worthiness of the scene. He wrote to Henner to come over to Peraud's as fast as possible, "before his features alter. He is as beautiful as a Christ." [39]

The bust of Pasteur by the sculptor Paul Dubois mentioned above was exhibited at the Salon of 1880. This was the bust the Danish brewer Jacobsen had commissioned in honor of Pasteur's work concerning fermentations and beer. It was in 1878 that Pasteur approved Jacobsen's idea for a statue of him to be

placed in the laboratory Jacobsen had built in Copenhagen. Pasteur was so concerned about this bust that he wrote to Dubois in mid-April, 1880, just before the Salon was to open, suggesting the words Dubois should use for its description in the official catalogue. "An idea about the sculpture you have made of me - I might add that it is the most wonderful that any artist has made so far - has come to me which I am communicating to you immediately. How are to you going to designate the bust in the Salon catalogue? My idea is this, that you can honor Monsieur Jacobsen by writing, "Bust of Monsieur Pasteur Commissioned by Monsieur Jacobsen, to be sent to the laboratory that he is constructing at Carlsberg, just outside the city of Copenhagen." [40] Pasteur hoped that the bust would receive favorable mentions in the Parisian press, and even wrote to his son-in-law, Rene Vallery-Radot, to speak to the reviewer at LE TEMPS about it. "You are known at the newspaper LE TEMPS in which the Salon review is written by Monsieur P. Mantz. It would be very desirable that in speaking of Paul Dubois's work, Monsieur P. Mantz would relate a few lines about the bust's origin and to signal the enlightened generosity of this rich industrialist who is giving one and a half million francs for the construction of a laboratory

dedicated to the art of brewing. You read LE TEMPS. When Paul Mantz's column appears, please let me know in which issue so that I can send it to Monsieur Jacobsen." [41] In August 1884, while representing France at the International Medical Congress at Copenhagen, Pasteur was able to see the bust in its place at Jacobsen's brewery. The street leading to the laboratory had been named rue Pasteur and at its entrance, Jacobsen's son "an important brewer himself, had erected outdoors, a bronze of the same bust with a pediment held by two green marble columns. In our honor, the French flag was raised over the brewery and their living quarters." [42] Pasteur was very concerned that France should continue to be seen as the world's leader in medicine. He wrote to Bouley that many German, American and British doctors were in attendance and that French doctors needed to devote more attention to the study of cholera. Pasteur would later on refuse Herve de Lorin-Beneteau's request to include a bust of him in his exhibition at Boulogne-sur-Mer. "La science a une modestie qu'il faut respecter," was Pasteur's stated reason, [43] but just ten days before, he had written to Carl Jacobsen asking for two plaster casts of the bust since his own was in poor condition. [44]
At the 1884 Salon, François Lafon's painting

PORTRAIT DE M. L. PASTEUR, [#1359] was exhibited. Pasteur had agreed to pose for Lafon at the artist's studio on the rue Cassette. Lafon was a young artist who had studied with Cabanel, and Pasteur thought that the portrait might turn out well. Pasteur mentioned the painting to Henner in a note of March 22. "A painter who appears to me to have some talent, M. Lafon, asked, with some insistence, to paint my portrait. You are going to be one of its judges at the Salon. His strong desire is to see it placed well and received favorably by the jury. I am really late in seeking your opinion. How I hesitate to ask you to come to see it while I pose for it. I always fear causing you any inconvenience. M. Lafon has his studio at 22 rue Cassette, thus very far from Place Pigalle." [45] In writing to Hennner, it appears Pasteur was seeking a good spot for his own portrait, but it was not the first time that Pasteur had written to Henner (a powerful member of the jury) on behalf of an artist. Just before the voting for medals at the 1883 Salon, Pasteur had sent Henner a note that "nous connaissons, mon gendre et moi, un jeune paysagiste de talent, de Bellay; si vous pouvez le servir en quelque chose vous obligerez un artiste d'avenir et votre tres affectionné et tres devoué, L. Pasteur." [46] Lafon's painting

received no mention in Salon reviews perhaps because it was, in the opinion of Maurice Vallery-Radot, "bien mediocre." [47]

In 1883 and 1884, Pasteur and his team had experienced several serious misfortunes. Thuillier's death during the expedition researching cholera at Alexandria, Egypt was the most severe. The team failed in its efforts and to make matters worse, Koch's research was successful. In 1884, the French government even invited Koch to investigate the new outbreak of cholera at Toulon, a matter which affected Pasteur deeply.[47b] He even included a cutting from LA NOUVELLE PRESSE which quoted an article of the BERLINER TAGEBLATT in a letter he sent from Paris to Straus and Roux at Toulon:

> It was as a result of a request made by the French government that Dr. Koch has left for Toulon. Faced with the negative results of the French cholera commission, the French government wanted as to learn about it as much as it wanted to know more exactly the fruitful research methods Dr. Koch described in one of his reports.
>
> If the BERLINER TAGEBLATT has not for a long time been known for the fantasies of its news stories, the column that we have quoted could cause some large and deserved reaction and would call for an immediate rebuttal.
>
> It is impossible that the French government would a given this mission to a Prussian scientist, regardless of his scientific authority.
>
> France, which has the honor of possessing scientists such as Monsieur Pasteur and his whole school, as

FIGURE 128 - ALFRED LE PETIT LA DECORATION DU DOCTEUR KOCH

FIGURE 129 - ALFRED LE PETIT LA ROUTE DE TOULON

> well as a Medical Faculty renown throughout Europe and an Academy of Medicine which even in the eyes of foreigners is of the highest rank, has no need to turn to the knowledge of a German scientist, one who has just entered this career whereas Monsieur Pasteur for twenty years has been working at it and making discoveries in the world of the infinitely small. [48]

In the spring, the residents of Meudon had complained to the government about Pasteur's keeping animals in their neighborhood, fearing that his rabid dogs might escape their kennels. It required a personal inspection of the kennels by Leon Say, at the time Deputy for Seine-et-Oise to reassure the Mayor of Meudon that "there was not a prison better guarded then Pasteur's kennels." [49] Several satirical illustrations made their way into the Parisian journals. Later in the year, when the government allocated land to Pasteur, the residents of St.-Cloud, Ville-d'Auray, Garches, Marnes and Vaucresson protested. On November 6, Pasteur wrote to his son that the matter "en ce moment [est] l'objet de mes preoccupations." [50]

Leon Bonnat exhibited two oil portraits at the Salon of 1886, (#274) PORTRAIT DE M. LE VICOMTE H. DELABORDE, SECRETAIRE PERPETUEL DE L'ACADEMIE DES BEAUX-ARTS and (#273) PORTRAIT DE M. PASTEUR ET DE SA PETITE-FILLE, MLLE. VALLERY-RADOT. "Since we have been

speaking of portraits," wrote de Boutarel in the NOUVELLE REVUE, "let us consider, with the attention that works of the highest order deserve, those of M. le vicomte Delaborde and of M. Pasteur, by M. Bonnat. It has become banal to say that M. Bonnat is a great master, that he gives an exceptional and magisterial character to those whom he paints." [51] Jules Comte remarked that Bonnat's talent had already been praised so much that "what can one add to what has not been repeated a hundred times about the talent of M. Bonnat with regard to his portrait of M. Pasteur and his grand-daughter, the daughter of our esteemed colleague, M. Vallery-Radot?" [52]

Bonnat chose to show Pasteur standing full-length and full face, a pose which been reserved by many artists for their noble and aristocratic models. He succeeded, however, in keeping Pasteur on a human level by placing his six-year old granddaughter next to him with Pasteur holding her in his left arm. One reviewer, in praising the work, paid particular attention to the contrasts between the aged grandfather and the youthful granddaughter.

> The presence of this child seemed to be included by the painter in order to show the person illustrated in domestic intimacy, because nowhere else is one so much himself than in the abandon of his hearth [foyer]....The strong molding of the head of the old one is the antithesis of the soft shape of his

> granddaughter's. The painter has left aside his Riberian-style. He has transformed the usual abruptness of his brush into infinite caresses in order to better render her character's youthful softness. He has also broken the monotony of the grandfather's black clothing and softened his rigid bearing and his stiff posture by the freedom and sureness of his touch. [53]

This seemed to be the general opinion about Bonnat's portrait. It was an intimate picture of the grandfatherly Pasteur. Georges Olmer said that "M. Bonnat...nous montre le grand savant sous l'aspect aimable et familial d'un papa gateau, heureux de montrer sa petite-fille." [54] In the prestigious GAZETTE DES BEAUX-ARTS, Alfred de Lostalot remarked that Bonnat's inclusion of the young girl added a note of tenderness to the portrait. "Monsieur Bonnat has painted the illustrious scientist, accompanied by his daughter [sic], 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. " [55]

Bonnat was already one of the most important portrait artists in France, having received portrait commissions from the highest level of French social, political and cultural life when he began Pasteur's portrait. In 1883, Jules Claretie had written that Bonnat's

portraits were conventional and always rendered a true likeness of their subject. "The great English portraitist, Thomas Lawrence, had an very wise theory: 'Choose,' he said to Merimée, 'one trait in the face of your model. Copy it exactly, even slavishly. You then can embellish all the others. You will have made a very accurate portrait, and the model will be satisfied.' This is also the principle of all our great modern portraitists which has inspired Bonnat in his admirable portraits." [56] Claretie then described a number of the portraits that Bonnat had painted during the late 1870s and the early 1880s, "This gallery of illustrious men that he has begun where the most opposite individuals meet....Victor Hugo, seated and pensive; the Duc d'Aumale very alive in his general's uniform...; Puvis de Chavannes, standing and bold like a priest, a masterpiece; the portrait of Monsieur de Lesseps, the portrait of the Duc de Broglie, that of Monsieur Grevy, and that of Monsieur Montalivet." [57] Claretie praised Bonnat's portrait of Adolph Thiers as, "une des toiles capitales du Salon de 1877" [58] Claretie also mentioned Bonnat's portraits of Alexandre Dumas fils [Figure 131], and Ernest Renan, "les deux mains croisées sur l'abdomen, dans une attitude quasi monacale, souriant finement et

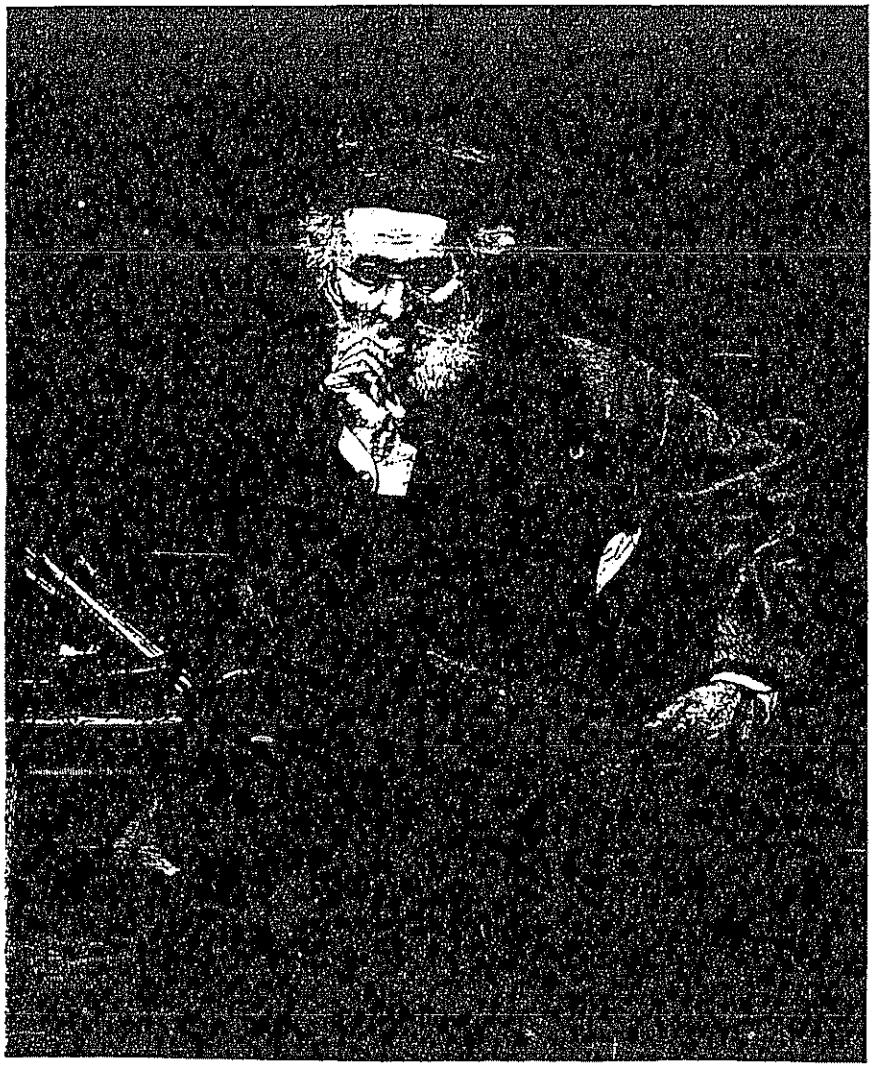

FIGURE 130 - LEON BONNAT PORTRAIT OF COGNIET

FIGURE 131 - LEON BONNAT PORTRAIT OF JOHN TAYLOR JOHNSTON

FIGURE 132 - LEON BONNAT PORTRAIT OF ALEXANDRE DUMAS

songeant, l'oeil profond, la levre sensuelle, mordante et indulgente à la fois." [59] Each of these portraits shows the subject by himself. Yet for Pasteur's portrait, Bonnat decided to paint his granddaughter as well. [60] Bonnat clearly chose to include her to emphasize that his was the portrait of Pasteur "en famille." Her presence underlines the difference between his portrait and those by Edelfelt and Laurent-Gsell. Noulens added that the clothing Pasteur wore in Bonnat's portrait was a compromise between academic garb and work attire. Pasteur's dark coat differentiated his painting (conventional) from Edelfelt's (new). "He [Bonnat] believed it to be preferable, for his gallery of contemporary celebrities, than the gravity of the official or semi-official garb. It was for this reason, no doubt, and perhaps to differentiate his from Monsieur Edelfelt's, that he has left to him his familiar and professional jacket. The formal coat is certainly less attractive, but Mosieur Bonnat has skillfully overcome this difficulty and has accomplished his task magisterially." [61]

Bonnat's painting had been commissioned by Jacobsen, not simply as Noulens indicated "to bear witness to his recognition of Pasteur for his

discovery in relation to the fermentation of hops." [62] Jacobsen had already honored that achievement with the commission of Dubois' bust of Pasteur. Jacobsen intended to present this new portrait to Madame Pasteur. [63] The arrangements for the painting were made between Jacobsen and Bonnat, seemingly without first consulting Pasteur. Apparently, Pasteur learned of the plan for the painting accidently, in a reference to it in a letter he received from his son-in-law, Rene Vallery-Radot. On September 25, 1885, Pasteur wrote to Jean-Baptiste that he had received a letter from Rene stating that Jacobsen had written to him (Rene) because he had not heard anything yet from Bonnat about his portrait of Pasteur. According to Vallery-Radot's letter, Jacobsen claimed to have definitely settled the arrangements for a portrait with Bonnat several months earlier, but had not heard from Bonnat about it since that time. Quite the contrary, Jacobsen wrote that he had also learned that M. Edelfelt had already done Pasteur's portrait. According to Rene's letter, the Pasteur family was completely unaware that Jacobsen had written to Bonnat and that Bonnat had accepted. "Est-ce assez étrange," Pasteur continued, "que Bonnat ne m'ait pas souffle mot de cette correspondance Cela s'eclaircira sans doute a

Paris." [64] Bonnat did not start his portrait until after Edelfelt's was done and, moreover, was aware of how Edelfelt had portrayed Pasteur. [see below, p. 618]

Bonnat's portrait was finished by March, 1886 in time to send it to the Salon. Henner saw it and reported to Pasteur that it was a wonderful painting. Pasteur sent his congratulations to Bonnat and included Henner's remarks verbatim. "My dear Bonnat," Pasteur wrote. "I copy [Henner's note to me]: `I just saw your portrait at Bonnat's studio. It is magnificent, one of his most beautiful works. The young girl is ravishing and looks just like her mother. I am very happy for you and I congratulate you. Your devoted Henner.' I do not add anything otherwise I would dare to think like Henner. I am going to send the letter to my son for M. Jacobsen. This good man has written that he has not dared ask Bonnat for a photograph of it. Best to you, my dear grand maitre." [65]

Charles Ponsonailhe, Salon reviewer for L'ARTISTE, thought that although the painting had some commendable aspects, overall the painting made Pasteur appear, wooden and stiff.

> The portrait of Monsieur Pasteur is very much to the crowd's taste, and with reason. Although it is a strong and powerful painting, with a very intelligent modelling, it errs by presenting to us the picture of a great man rather than that of a

real person.

> The illustrious scientist is standing in that stiff pose of a photographer's victim, with one of those copper apparatuses called "a sustainer" that one find's in the photographer's studio stuck down his back. 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 Monsieur Bonnat is a member of the Institute painted by his colleague, another member of the Institute.
>
> Preoccupation with posterity has intervened to freeze his pose with a type of sacred respect. It has suppressed all that is natural and alive. The painter's model has not yet been cast in bronze, but he already has his wooden statue in this classical tableau. I cannot understand by what strange tendency of spirit M. Bonnat, who just this winter showed us a masterpiece of color, of light and of modelling, the PORTRAIT OF A FRENCH LANDSCAPE ARTIST, could stray down such a false path. Why has he abandoned his broad and succulent finish [facture], his warm tones that he succeeds with so well to fall into such a strange and hardness and dryness? He has made an etching with his paintbrush. He has created his faces by means of gray hatchmarks with the most disagreeable effect. When will he find himself again, that is to say to once again find that liberty and freedom of touch that I admired even yesterday in the VICTOR HUGO that is in the collection of John Saulnier. [66]

The Salon reviewer for the ART JOURNAL of London wrote that "Portraits of M. Pasteur of course abound. M. Bonnat heads this list with what would have been a very fine work, were it not for the blackness of the shadows and the general hardness of the tone." [67] Ponsonailhe even referred to the painting the next year when, wishing to praise Bonnat's portrait of Alexandre

Dumas, he wrote how much he preferred it to the wooden likeness of Pasteur. "The artist has left those cutouts made of zinc with which he had lingered and from those painted wooden statues which were supposed to serve us as reminders of M. Pasteur and the other contemporary celebrities." [68]

Bonnat's portrait of Pasteur was criticized not only as having been painted so poorly, but also because Edelfelt's was considered so much better. When praising Edelfelt's painting, reviewers invariably noted that showing Pasteur at work in his laboratory enabled Edelfelt to show us Pasteur's grandeur and fenius. According to Paul Leroi in L'ART, "le meilleur portrait du Salon - apres avoir, bien entendu, mis M. Delaunay hors rang - est celui de M. PASTEUR, par M. Albert Edelfelt." [69] Leroi noted that in lesser hands, such a portrait might have remained a mere anecdote. "The excellent Finnish artist, whose work DIVINE SERVICE AT THE SEASIDE one can admire in the Luxembourg Museum, shows us the scientist at work. On 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 anti-artistic, can never endure.

If, by chance, they do obtain it, it is fleeting at best. To Monsieur Edelfelt goes the honor of having created a work which is gripping. His canvas is an historic portrait." [70] Alfred de Lostalot remarked that Edelfelt had given us Pasteur the observant scientific researcher and that the artist's inclusion of so many pieces of laboratory equipment in no way detracted from the painting's popular interest or artistic success. "M. Edelfelt's painting shows us Pasteur abosorbed 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. The painting is excellent and filled with interest. The light plays freely on the laboratory equipment, and yet not one detail detracts from the grandeur of the subject." [71]

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

> Monsieur 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, standing in front of a table encumbered by flasks and retorts. He holds a test tube in his hand. He attentively studies some law of physics.

> The light, however, flickers on the waxed canvas and on the marble table-top, a ray is caught on the round belly of the copper distilling apparatus. 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 peircing 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.1 No, he is the simple and gentle scientist, preeminently good, suprised in the intimacy of his work, of his daily and familiar tasks. Monsieur Edelfelt has known how, in a canvas so willfully simple, to render the soul and the height of his scientific individuality. He is privileged, so rare these days, to bring forth as much sympathy by his character as by the admiration for his genius. M. Edelfelt is a luministe. He has just proven preemptorially that this new school is able, as well or better than its predecessors, to transmit to future generations the likeness of the men whos name belongs to history and whose portraits will be piously collected by historians. [72]

Ponsonailhe believed that Edelfelt's portrait would have a strong influence on the way portraits would be painted henceforward. In his view, artists like Edelfelt, Besnard (a Prix de Rome winner), Roll and Edelfelt particularly, academic in temperment would take the lead in this new direction. He did not believe that the Impressionists or other independents were the only artists who could claim to be modern. He wrote, "Les impressionistes...pretendent etre les pionniers de ce champ nouveau, les seuls autorises à faire la semaille des moissions futures. Et c'est justement devant ces pretentions exorbitants, devant

cet esprit de parti exageré, outrancier, que je constate avec joie et satisfaction le success de MM. Roll et Edelfelt." [73]

Twenty years later, Ch. Moreau-Vauthier still noted how new Edelfelt's portrait had appeared and how different from earlier conventional portraits.

> Here is the portait of a scientist where the artist has honored him for his science. Before this, one never found a similar painting. When by chance the old masters deigned to picture a person who was not a king or a hero, when they represented a man celebrated for his intelligence and his talent, they never dared to show him how he actually looked. Often, they even tried to apply to him the attributes of a hero or a king....
>
> This great scientist appears before us at the Ecole Normale, in his laboratory at the rue d'Ulm where he made his discoveries. Wearing a simple brown jacket, Pasteur holds his laboratory card and examines a glass flask. He is not interested in charming us by the expensiveness of his clothing or the furnishing of his rooms, or by his pleasant smile. A thinker, observant, his head inclined, he works....
>
> Is it not that while Pasteur gazes at the piece of rabid marrow that has been detached from the body of a rabbit and is now in this glass flask, and his efforts to discover the hidden secrets , that his suppositions and his hypotheses, all his attempts to penetrate the secrets of nature, that he does the work of a visionary and a poet? And do not the discoveries that are the crowning results of his research - admirable for their usefulness and their benefit - do they not at the same time equal, by the infinite sights that they uncover, the sublimity of Literature and of Art? [74]

Edelfelt began living in Paris in 1874 when he was nineteen years old, although he returned to his

home in Finland for extended periods in 1875 and 1880. In 1909, Leonce Benedite had noted that Edelfelt "est reste populaire en France, où il etait fixé la moitie de l'année depuis 1874." [75] He studied at Gerome's atelier in Paris, [76] and while there in 1876, he became friendly with Bastien-Lepage, whose work influenced him. At the Salon of 1877, Edelfelt exhibited a portrait of BLANCHE DE NAMUR, REINE DE SUEDE, ET LE PRINCE HAQUIN (Catalogue #793). But it was his painting, ENTERREMENT D'UN ENFANT, exhibited at the Salon of 1879, that marked the beginning of Edelfelt's success. [77]

In 1880, Edelfelt met Jean-Baptiste Pasteur and became friendly with the entire Pasteur family. Edelfelt had adopted France as his second home and was increasingly "Parisian" in speech and manner. Denise Bernard-Folliot has called it his Parisian varnish. "Toutes les lettres des peintres nordiques de cette epoque parlent de 'cette façon inimitable qu'a Edelfelt de dire: Charme de faire votre connaissance!'" [78] Thiebault-Sisson, reviewing the Salon of 1895 remarked that "M. Edelfelt est Finlandais, c'est-a-dire plûtot Suedois, quoique les Finlandais fassent partie de l'empire russe. Il suit le mouvement des Suedois; il est français davantage." [79] His paintings at the

1880 Salon illustrate this duality, (#1333) LE CONVOI D'UN ENFANT (FINLANDE) and (#1334) PORTRAIT DE M. KOECHLIN-SCHWARTZ, MAIRE DU VIIIe ARRONDISSEMENT.

Although still quite young when he returned to Paris in 1881, Edelfelt's career had been successful enough to allow him to relocate from 81 Boulevard Montparnasse to the much more fashionable 147 avenue de Villiers (during his earliest stay in the capital, he had occupied an extremely modest place at 24 rue Bonaparte). At the Salon of 1881, Edelfelt exhibited (#840) CHEZ L'ARTISTE as well as (#839) PORTRAIT OF M. DAGNAN-BOUVERET.

At the Salon 1882, Edelfelt's painting, LE SERVICE DIVINS AU BORD DE LA MER, a scene of the Nyland archipelago, was awarded a Second Class Medal and purchased by the State for the Luxembourg Museum [currently at the Lille Museum]. With these honors, Edelfelt was able to garner many commissions for portraits. Edelfelt believed that one of art's missions, or at least his mission as an artist, was to bring honor to his nation by illustrating its culture and its history. "Edelfelt...always beleive that he was born to honor his nation's by illustrating its history." [80] The success of LE SERVICE DIVIN also marked, according to Bernard-Folliot, "une oeuvre de

transition, à la fois realiste et en meme temps par sa lumière et sa clarté, dans le droit fil de la peinture nouvelle." [81]

Edelfelt wrote frequently to his mother during the time he was painting Pasteur's portrait. Some of his letters are dated only three days apart. These letters home begin April 18, 1885 and make it clear that from the very first, Edelfelt thought of painting Pasteur in his working milieu and surrounded by his laboratory instruments. He had decided not to follow the conventional portrait style showing Pasteur in his Academic robes or in coat and tie. "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." [82] Edelfelt's testimony also makes it evident that Pasteur became completely involved in the painting's composition, and extremely concerned that Edelfelt get the science part right. Edelfelt visited Pasteur's laboratory while the rabies experiments were in

progress. His letters afford us a glimpse of the day-to-day activity in the laboratory. They give a very different impression than the traditional view that Pasteur allowed no interruptions while he was at work. According to Edelfelt, his assistants constantly were at him, asking questions, and requesting that he attend to matters himself. On April 23, Edelefelt wrote that

> as far as the Pasteur portrait is concerned, there is nothing decided and I am sorry that our newspapers are speaking about this matter (I have not seen them, but Pipping told me this). 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. 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 have seen rabid dogs and monkey in all stages, from lively nervousness to rage and thereafter as they are in the process of calming down and then paralysis and then death. I would like to paint the old fellow in the laboratory and in front of his creatures, but I found immediately 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 unsure. [83]

A month later, on May 27, Edelfelt was able to write to his mother that he had

> come to grips with it and next week will start with Pasteur. It <u>will</u> [emphasis in original] be good. Today I 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 <u>standing</u>. His writing room looks like any old cabinet - 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 therefore he occupied himself with the noble art. He has made a lot of portraits in pastel. An old lady 'aunt' had said to him during the long time he only studied and one never saw any result of his studies, why didn't he stick to painting? He could have made a name for himself in this field.
>
> With a real scientist's eagerness, he shows and explains all his deliberations. And he does it in such a non-using manner, that I understand it all. He has large micro-greenhouses, or whatever one calls them, rooms with different temperatures where he has microbes in hundreds of bottles. He verifies at what degree they expand or die, etc. A Russian doctor sat there and worked, and also a Swede. A young doctor, Loir, Pasteur's nephew, promised to assist me with advice. Today I say 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 Academie Français. [84]

Edelfelt was pleased with the progress he was making. Nine days later, 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 reflection on the face of the old man." [85]

Edelfelt wrote that he was interested in Pasteur's personality and described his character to his mother.

> The old guy Pasteur is a rather complicated character. Certainly a genius, but so methodical, so unhurried and patient, a veritable worker ant, that in this aspect, he could put a civil servant or a punctual rentier to the wall [i.e., he expects others to work as hard as he does. RW]. He is naive about many things. He has a strange respect and admiration for everything that lasts and a real conservative nature. The most abrupt disputes are fought between him and his first assistant Roux, who has a really revolutionary nature. They mostly argue about Academies and Institutes which are attacked by Roux and defended by Pasteur." [86]

Gerald Geison has described the relationship between Pasteur and Roux as contentious, "always difficult....Some of the discord between Pasteur and Roux over rabies can be traced to the differences in their professional formation and orientation....No small part of the tension between Pasteur and Roux was 'merely' personal....The other differences between Pasteur and Roux were no less striking. Politically, if forced to choose, Pasteur would have been seated far to the right, while Roux would have leaned to the left -- though Pasteur found a way to accomodate himself to whatever party held power. while Roux usually hovered above or beyond politics in the ordinary sense....And once Roux joined the Pastorian team, their personal differences were exacerbated by a sense of rivalry

between master and employee as they worked toward vaccines against anthrax and rabies. Behind the scenes, they were sometimes competing with each other almost as much as they were collaborating, and there are signs that Roux resented his subordinate role and Pasteur's high-handed treatment of him." [87] Thus Edelfelt, an outsider, had been witness to the disputes between Pasteur and Roux.

Rene Dubos noted that Pasteur's experiments at this time involved "the length of survival of the rabies virus in the spinal cord. For this purpose, he had placed infected cord in a flask with two openings, the cord hanging inside and attached to the stopper which closed one of the openings. Pasteur once walked into the incubator where Roux's flasks had been placed, accompanied by Loir....'Once back in the main laboratory, he ordered me [Loir] to obtain a number of similar flasks from the glass blower. The sight of Roux's flasks had given him the ideas of keeping the spinal cord in a container with caustic potash to prevent putrefaction, and allowing penetration of oxygen to attenuate the virus. The famous portrait painted by Edlefelt shows Pasteur absorbed in the contemplation of one of these flasks." [88] Geison's research carries the story a bit farther, describing

Roux's reaction to the "new" flasks Pasteur began to use. "Roux noticed three of these new flasks sitting on a table in the laboratory. He sent for Loir:

> Who put those three flasks there, he asked me while pointing to the table. M. Pasteur, I answered. He went to the stove? [asked Roux]. Yes [I replied]. Without saying another word, Roux put on his hat, went down the stairs, and left by the door on the rue d'Ulm, slamming it shut as he [always] did when angry. [89]

Pasteur's flasks were much larger than Roux's and that Edelfelt should illustrate the correct one was apparently no small matter to Pasteur. When the artist began to paint a smaller one - Hintze's Catalogue Raisonne shows two different studies for the painting which show Pasteur holding the small flasks - Pasteur stopped him and made him replace it with the correct flask he was using in his experiments. Edelfelt wrote to his mother on June 28,

> He has made me take away a microbottle and instead put in my hand a larger glass dome with a piece of dog bone marrow dangling from a thread. The old man says that this is something one still does not know, but that will have a big significance. He is now doing studies on nerves and spines and marrows and the like. Furthermore, he has gone through all the 'bibelots' that I have placed around him. He has made me remove some that were unnecessary 'au point de vue scientifique,' [in French in original] put others there, 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.' God grant that he be right." [90]

This was certainly a high compliment from Pasteur; hard

work was one of his foremost values. Pasteur's strong feelings for Edelfelt were also expressed in a letter he wrote to the artist's young sister Annie, for her autograph collection. "I do not know, chère mademoiselle, if the customs of your country permit a man of a quite respectable age to say to a young person that he loves her, without ever meeting her. 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." [91]

In November, Edelfelt got word that Bonnat was about to start his portrait of Pasteur. As might be imagined, the news did not please the young painter but Edelfelt wrote to his mother that Pasteur had reassured him. "Pasteur's son has been here. Imagine, it was two years ago that Jacobsen, the millionaire brewer from Copenhagen, ordered the old fellow's portrait from Bonnat. He has advertised the painting, so that Bonnat is about to have his first sitting in a few days. It angers me very much to have such a competitor. Pasteur himself said that mine is going to be better -- we'll see how it goes." [92]

As the Salon approached and the jury began

its selection procedure, Edelfelt again wrote to his mother about the portrait. "Every painter that I have met has spoken about my portrait of Pasteur. They say it has had a big success before the jury." [93] Just three days later, he wrote further about his portrait and the jury. According to Edelfelt, painters agreed that his idea of placing Pasteur in his laboratory had made his portrait much more interesting than Bonnat's.

> A propos Pasteur, supposedly Bonnat has been very kind to me and supposedly has been the first one who mentioned my Pasteur in the most flattering words and added, `nous voterons au numero 1 a l'unanimité, n'est-ce pas messieurs?' No. 1 is given to only a few paintings, most get 2 or 3. In other words, I have the right to get an outstanding place in the Salon. Unfortunately the letter E is going to be in the same room as three years ago where Mrs. Reuterskiold exhibited. The letters get their places after a lottery, and those rooms furthest away are not the first ones that will draw the public's attention.
>
> Bonnat's portrait is supposed to have made a more powerful effect than mine. But painters [Edelfelt's emphasis] feel that mine is more interesting. That the big public will be more attached to Bonnat's is as clear as the day. His name and reputation is a guarantee for that. I only hope Wolff's Figaro will be favorably disposed toward me. That nut has a strange influence on public opinion." [94]

When the Salon finally opened, Edelfelt was more than pleased with the response to his painting among artists and critics.

> It really is a shame that I didn't have a chance to write at all yesterday, the varnishing day, and tell you mother that my `Salon' has been a much better success that I would ever have expected. I have had that which I have always longed for, in other words

> a "success d'artiste.' So far I don't know anything about the large public. But all whose judgment I care about have expressed their satisfaction with my Pasteur and my pastel in the most beautiful words. The newspapers have been very nice. They all established a comparison between my portrait and Bonnat's and all to my advantage....[sic] I scurried through a whole lot of rooms in order to see Bonnat's portrait. When one knows the old fellow Pasteur, then one must admit that Bonnat has not understood his character in the least. And he has had the unfortunate idea of making him look more beautiful, making his eyes shine and his mouth more delicate and the like. -- In a word, as much as I respect Bonnat's talent, I just couldn't stand this painting....[sic] In other words, I have had 'un grand succes!' I could never have believed this. And then, eventually, one after the other people came and began to stop in front of my Pasteur. And the discussions started, and everyone spoke of Bonnat's and my portraits together. As self-loving as this sounds, I must say that everyone gave mine preference." [95]

Early the next month, Edelfelt reported that he had heard some good news about his painting. "The other day, the Minister of Culture, Goblet, had breakfast with Pasteur and had supposedly spoken of the Legion of Honor for me." [96] Edelfelt was not disappointed.

Pasteur, too, was extremely pleased with Edelfelt's portrait and even mentioned to Jacobsen that it compared well to the bust by Dubois he had commissioned. "Avec le portrait à l'huile d'Edelfelt, je ne rien de plus ressemblent et de mieux executé." [97] Since Jacobsen had also commissioned Bonnat's portrait, Pasteur's omission of a reference to it takes

on an added significance.

In early May, just after the Salon's opening, Edelfelt wrote to his mother that the reviewers preferred his painting over Bonnat's portrait. But not all the critics held this view. In LA NOUVELLE REVUE, De Boutarel wrote that Bonnat's portraits were of the highest order, but simply mentioned Edelfelt's among a list of eight "beaux portraits." [98] Georges Lafenestre, reviewer for the REVUE DES DEUX-MONDES, gave the edge to Bonnat's painting. Edelfelt, Lafenestre felt, went too far by including so many flasks and pieces of scientific equipment. Pasteur's personality got lost among all these details, a mistake not committed by Bonnat.

> The painting by Monsieur Edelfelt, very lively painted, with an attraction that is quite intimate and familiar, shows M. Pasteur in his laboratory, among phials 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 erraced 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 surroundings....
>
> Bonnat's portrait is the historic image. Monsieur Edelfelt's is nothing more than an anecdotal picture. One complements the other, but we cannot admire them to the same degree. It is permissable

> to believe, that every time it is a question where a face in which intelligence must speak, it is suitable to use discretion and not to suffocate its words under the confused noise of the murmur of too many things. Just next to the nearly full-length portrait of Pasteur, M. Bonnat exhibits a half-portrait [buste] of Viscount Delaborde, made with the same expressive firmness, and which will remain one of the most masculine paintings that comes from his hand. [99]

Lafenestre's most pointed criticism of Edelfelt's painting was that it was merely "amusant," an "image anecdotique." In other words, the portrait had reduced Pasteur's entire life to merely one episode. Edelfelt had reduced Pastuer by painting a genre painting instead of a portrait. Instead of making Pasteur a hero, Edelfelt had overwhelmed his subject with the details of the laboratory. Flasks and phials, test tubes and microscopes were the impermanent objects of Pasteur's work environment. They draw our attention away from the more important idea of Pasteur, his character. Bonnat, on the other hand, had "comme d'habitude," kept the background indefinite and thus produced the historic image of Pasteur. Lafenestre had recognized that Edelfelt's portrait did not follow the usual conventions of portraiture. He didn't approve.

Lafenestre traced the interest younger artists had recently shown in including details of modern life their paintings to the French landscape painters. For portrait artists, these details meant

including the subject's workplace and the tools of his trade.

> Portraitists cannot remain insensitive to this great movement which returns to a more attentive observation of real details and of the phenomena of light, which was first employed by our glorious school of landscapists and is in the process of stirring up and regenerating every variety of anecdotal, familiar and fantastic painting which had previously been mixed together under the collective name of genre painting, and which in general had as its objective the representation of contemporary life. The tendancy to place, as much as possible, living persons in the usual milieu instead of isolating their face or their body on a neutral background already has become widely expanded....As much as it may be useful to explain a person by the well-chosen accompaniment of several accessories which reveal his intellectual or physical habits, it should also be unsuitable to drown the person under the mass of exact but perfectly insignificant details. [100]

Lafenestre developed this theme even further. He discussed to paintings exhibited at that Salon by Cabanel, Edelfelt's former teacher. Only the one that avoided too many accessories had attracted the crowds. The subject of the other portrait was overwhelmed by all these things. "The preceding observations should help to explain why, that of the two admirable full-length portraits exhibited by Monsieur Cabanel, LE FONDATEUR and LA FONDATRICE DE L'ORDRE DES PETITES-SOEURS DES PAUVRES, the Salon visitors, by their very true instincts, preferred the woman to the man. M. Cabanel has placed them both in the ordinary milieu,

each seated on a simple chair, near a smale desk filled with papers, in well-lighted offices whose white walls were equally covered with geographic maps and administrative charts....Why then did they make different impressions? It is because, in the portrait of the FONDATRICE, every expressive detail of the furnishings light up her face without annihilating it. They have been maintained clearly and wisely subordinate. They only serve to place her body in the light and leave her holy figure freely in the light." [101]

Albert Wolff, the critic Edelfelt believed had the most influence and whose favorable notice he most desired, indeed preferred the younger artist's canvas. His called Bonnat's painting "ressemblent," more as a pejorative than as praise. He described Bonnat as one of the most skillful artists of his day. Skillful was another description which might be taken as a negative. Wolff described Edelfelt's canvas as filled with feeling, an important contemporary criterion by which "mere" photographic likenesses were distinguished from important paintings.

> Monsieur Pasteur has posed two times, once 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 resemblant. 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 get to the bottom of. He has brough him to life before us, in the process of his thoughts, in the that state of his soul or his spirit (whichever you wish), finally in the mysterious gestation of that discovery which has guaranteed Pasteur's fame for all time. The young man, then, was more right than the master and, if they were brought together in the same place, Edelfelt's would certainly give us an more exact idea of who Pasteur was than would Bonnat's work. [102]

For the World's Fair of 1889, it was a print of Edelfelt's portrait that was exhibited (prints of Gervex's AVANT L'OPERATION and Brouillet's LECON CLINIQUE A LA SALPETRIERE were also shown at there), not that of Bonnat's.

The third portrait of Pasteur at the Salon, LE LABORATOIRE DE M. PASTEUR (#1384) by Lucien Laurent-Gsell, also showed Pasteur at work in his laboratory. Laurent-Gsell (that is how he signed his paintings) was born in Paris on November 19, 1860 and had been exhibiting at the Salon only since 1882. The young artist had studied with his father and at Cabanel's studio at the Ecole des Beaux-Arts. He had had a very successful Salon in 1885 where he exhibited L'ATELIER

DE CABANEL A L'ECOLE DES BEAUX-ARTS. At the Salon of 1886, according to a contemporary observer, "no fewer than 112 exhibitors signed themselves 'pupils of Cabanel.'" [103] Paul Leroi, critic for L'ART, claimed to have heard the story of how he began to study with Cabanel from Laurent-Gsell himself. Leroi had asked the artist about his studies, noting that the Catalogue listed him as a

> student of M. Cabanel, whose studio he attended. In reality, however, he had no other teacher than his father, the eminent painter on glass. For as long as he can remember, he always drew under his watchful eye.
>
> When he entered the Lycée Saint-Louis, he was hardly interested in anything but science. He received his Bachelor of Science degree. His father then sent him to the Ecole Des Beaux-Arts to study with Henri Lehmann. Lehmann passion for his gifted student, however, was too tyrannical for the spirit of his disciple. Wishing for more independence, Laurent-Gsell presented himself at Cabanel's atelier with a letter of introduction from the worthy Lehmann, as excellent a human being as he was mediocre as an artist. Laurent-Gsell's eyes were filled with tears for having abandoned Lehmann. "I will always feel the pain that I have given to this old man," repeated the deserter of Lehmann's atelier. It was quite a different story in Cabanel's atelier. He treated the renegade very lightly and gave him very little counsel. "But I will always praise that which he gave me and which he told me with great tact," added the young artist. "I am sure that they have often been very useful to me." [103b]

Laurent-Gsell's studies in science as well as his family connections attracted him to Pasteur's laboratory. According to Paul Leroi, Laurent-Gsell was

completely successful in painting Pasteur in his milieu. "Neveu du plus illustré savant de ce temps, il s'attacha a reproduire LE LABORATOIRE DE M. PASTEUR et l'a fait avec un complet succes." [104]

Laurent-Gsell's canvas did not attract the same crowds of viewers as did Bonnat's and Edelfelt's painting. It had been placed in room nineteen, not a terrible location although near the end of right hallway as one entered the Palais De L'Industrie. Unfortunately, the young artist's portrait was hung near the ceiling, out of sight of all but the most curious visitors. J. Noulens wrote that, "This composition, as interesting from a scientific as from an artistic point of view, because of its small size was not able to be appreciated while on the walls of the exhibition. They had hung it on the second level of paintings. The previous year, Laurent-Gsell's painting of Cabanel's atelier had received a good position. This year, for his painting, PASTEUR'S LABORATORY, it was not the same. This one was exiled to the highest place and it could be distinguished as poorly as if it were in a fog. The artist, I am sure, was not happy with this form of apotheosis. Happily, Monsieur Rothschild, who has an eye that can see at a distance and the taste to make amends, was impressed

enough to acquire this small canvas and to give it the place in his own gallery that it merited. " [105] Alphonse de Rotschild purchased Laurent-Gsell's LABORATOIRE DE M. PASTEUR. Perhaps his purchase was due as much to the fact that the wife of Baron Nathaniel de Rothschild had purchased Laurent-Gsell's L'ATELIER DE M. CABANEL the previous year as to his appreciation of its artistic merits.

Noulens praised the faithfulness with Laurent-Gsell had depicted Pasteur's working milieu. "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. Two large bay windows pour a gray light into the vast room. Pasteur, relegated to the background of the canvas, with a scrupulous eye, examines the contents of the flask held by one of his assistants. Two seated assistants are in the midst of experiments. On the tables there is an overabundance of retorts and diverse apparatus." [106] As is evident from comparing Noulens verbal description of the final painting with the study for it, Laurent-Gsell's final Salon version differed substantially. In the study, Pasteur is examining a flask, but he holds it himself.

It is not the same dessicating flask using dry air and potash Pasteur holds in Edelfelt's painting. Only one assistant is present in the laboratory and no other experiments are being conducted.

Thus at the Salon of 1886, Pasteur had been portrayed several times: traditionally in Bonnat's studio portrait, but also as a scientist at work in his laboratory and surrounded by the equipment of his daily activities by both Edelfelt and Laurent-Gsell. These last two portraits testified to Pasteur's supreme confidence, although the concern over beginning tests on humans was on Pasteur's mind at the time. Edelfelt's painting was completed during the most important phase of Pasteur's anti-rabies vaccine experiments, after he had done tests on animals but before it had been tested on humans. Pasteur had frequently remarked that he needed to proceed cautiously and that he feared performing the first test on humans. "Je veux reunir d'abord une foule de succes sur les animaux....il me semble que la main me tremblera quand il faudra passer a l'espece humaine." [107] He warned a certain Monsieur X in December, 1884 not to bring a young bite-victim to Paris since he was still only experimenting on animals. [108] And in March, 1885, "I have not yet dared to treat humans

after they have been bitten....I would prefer to experiment on myself first." [109] Had Pasteur truly believed that his work might turn out badly, would he have been so willing to permit Edelfelt to paint him conducting his experiment? Bonnat's portrait was begun after there had been many successful cures brought about by the vaccine yet he had chosen to paint Pasteur in the conventional way, omitting any reference to Pasteur's scientific work. At the next year's Salon, the connection between Pasteur's microbiology and medicine was made explicit.

At the Salon of 1887, hours of admission and ticket prices were nearly the same as in the previous year, with two differences. In 1887, the Friday charge was raised from two to five francs (opening day remained five francs as in 1886) and the exhibition was closed for three days - the twenty-seventh, twenty-eight and twenty-ninth of May due to repairs (travaux) to the exhibition gallery. Two extra room had to be added, numbers thirty-four and thirty-five, to accomodate the increased number of works exhibited.

At this Salon, Laurent-Gsell's painting, LA VACCINE DE LA RAGE AU LABORATOIRE DE M. PASTEUR, (#1423) showed that the connection between Pasteur's laboratory work and medicine, between his science and

FIGURE 133 - LUCIEN LAURENT-GSELL LA VACCINE DE LA RAGE AU LABORATOIRE DE MONSIEUR PASTEUR

its application to the treatment of illness was direct. In this painting, Laurent-Gsell moved Pasteur from his laboratory to his clinic (although it continued to be called his "laboratory" since Pasteur was not a doctor), and portrayed him supervising his medical assistant, Dr. Joseph Grancher (1843-1907), inoculating a small child, and surrounded by other patients, friends, family as well as a number of curious observers.

On July 6, 1885, Joseph Meister became the first human patient to receive the anti-rabies vaccine. Meister, a nine year old from Alsace, sought treatment for dog bites he had suffered two days before. The treatment was successful, and Pasteur's second patient, Jean-Baptiste Jupille, was treated in mid-October. Leaders of both the Academies of Sciences and of Medicine praised Pasteur's accomplishment as "forever memorable in the history of medicine and forever glorious for French science," and "one of the most memorable, if not the most memorable, in the history of the conquests of science and in the annals of the Academy [of Medicine] [109b] The vaccine was quickly put into wide use, even though some questions about it remained. [110] In the summer of 1886, Pasteur wrote to Victor Horsley that 1,986 patients had been treated,

who had come from sixteen different nations:

France and Algeria	1,324	
England	68	
Austria-Hungary	43	
Germany	9	
America	18	
Brazil	2	
Belgium	50	
Spain	75	
Greece	10	
Portugal	24	
Holland	14	
Italy	138	
Russia	186	
Roumania	20	
Turkey	2	
Bombay	1	[111]

Pasteur's critics did not trust these statistics. They ridiculed them saying that they showed that either France had a much more serious problem of rabid dogs than did its neighbors in Europe (or India), or that a great number of people were being vaccinated who did not have rabies. [112]

But Pasteur did see patients from all over the globe and Laurent-Gsell's painting illustrates their arrival at Pasteur's clinic from around the world. This fact, in Pasteur's view, showed French medicine had regained its rightful place as the world's leader. As he wrote to Liard, "I am very happy that this new success will be rendered to France." [113] It had certainly been one of Pasteur's hopes that

microbiology would benefit people from all over the world, a goal that became a primary mission of the Pasteur Institute. [114]

The painting was mislabeled LE PREMIER SEPTEMBER in the editions of the catalogue that were distributed to early salon visitors and critics. Paul Leroi, salonnier for L'ART, apologized to his readers for having called the painting by the wrong title in his first article. "This year," he wrote, "Monsieur Lucien Laurent-Gsell has taken a giant step. His intelligent composition, THE FIRST OF SEPTEMBER (#1423), shows us a young mother having her little daughter vaccinated against rabies. Also present are Russian, arab and other visitors. The painter has illustrated the traits and bearing of his uncle, the illustrious scientist Monsieur Pasteur. The groups have been established well. Only the child leaves something to be desired. The expression of each person is perfect. Overall, it is very much alive. The tone is accurate. The shapes are indicated very well, although perhaps somewhat superficially, something not surprising from such a young man. In any case, it 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. " [115] In his second

article, Leroi corrected his error. "I am obliged to begin the article by correcting an error. THE FIRST OF SEPTEMBER, which the catalogue had given to the painting by Lucien Laurent-Gsell, had appeared to me to be a very strange title, and beforeprinting his two drawings, I had written to the artist for information. His reply arrived too late, I must now correct the Catalogue's error which I had been forced to reproduce. Monsieur Laurent-Gsell informed me himself that the real title is THE RABIES VACCINE [LA VACCINE DE LA RAGE]." [116]

Charles Ponsonailhe, still reviewing for L'ARTISTE, also cited the incorrect title, and did not ever correct his error. He praised the painting, although not in such glowing terms as Leroi.

> In THE FIRST OF SEPTEMBER, Monsieur 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. Russian muziks in their fur caps and greasy beards, an arab from big tent wearing a long fine woolen cloak, and whose hood holds his strong head. A Frenchman, some women, children, doctors, internes and the illustrious scientist himself comprise a well-thought out group. In the foreground, Monsieur Pasteur. In the center, a small boy held up by his mother and on whom a surgeon's assistant prepares to inoculate with the rabies' vaccine. On the right is the group of foreign people already indicated.
>
> Using good judgment, Monsieur Laurent-Gsell has lightened his canvas by the light that filters through a large window provided with muslin curtains. In this white tone, the flowing gown of

> the African respond like an echo, and here and there are the ricochets of the softened drops of white that have splashed on the glass partitions and the laboratory retorts. Previously, I had reproached M. Laurent Gsell for a lack of originality and of artistic imagination, and to have found this idea already presented in the PORTRAIT DE M. PASTEUR by Monsieur Edelfelt. But Laurent-Gsell has developed and his observation is well-grounded. To paraphrase this theme, he his personality has grown an amount sufficient for his past to be pardoned and now to be keenly honored. Only the sick child can be faulted for its old-fashioned prettiness. He brings to mind the babies in the keepsakes, the illustrations in the magazines under Louis-Philippe. [117]

Ponsonailhe thus considered Laurent-Gsell's canvas developed from Edelfelt's portrait of the previous year. "M. Laurent-Gsell suit la meme voie. On ne doit pas marchander l'eloge a sa CLINIQUE DE M. PASTEUR, bien que ce tableau soit l'amplification simplement du PASTEUR SANS SON LABORATOIRE de M. Edelfelt." [118] It is significant that Ponsonailhe believed it was Edelfelt's painting which engendered Laurent-Gsell's 1887 canvas rather than his own of the previous year. The explanation may simply be that Ponsonailhe had failed to notice Laurent-Gsell's first one. In any case, Ponsonailhe believed that Edelfelt's painting had been important enough to inspire other artists to follow the same path.

Leroi was generous in praising Laurent-Gsell, although he believed that LA VACCINE DE LA RAGE was the better of the two paintings the artist had submitted to

the Salon in 1887.

> He has faith in himself and he will arrive. People of taste and of confidence knew how to discover Salon paintings -- L'ATELIER DE CABANEL A L'ECOLE DES BEAUX-ARTS, of 1885, and LE LABORATOIRE DE M. PASTEUR of 1886;--they saw in them his sincerity and his meritable delicacy. They were impressed, and in buying these two canvases, encouraged a debut rich with happy promise. They have seen correctly. Two years were sufficient for M. Laurent-Gsell to pay back the confidence born from his first attempts. His Maecenae have facilitated the career of a true artist and one of these innumerable dry fruits whose invasion of each Salon increases.
>
> This young painter has exhibited this year a second painting, THE BAKERS - also as badly placed as possible, and which I was only able to uncover after several unfruitful searches. It is a very fine study, although not nearly of the same merit as LA VACCINE DE LA RAGE....Beginning with this Salon of 1887, he will have a name. Obscurity is over for him, but his obligations have increased. He must justify, with greater and greater merit, the attention that has been attached to him." [119]

George Lafenestre grouped Laurent-Gsell's painting with Gervex's AVANT L'OPERATION and Brouillet's LECON CLINIQUE A LA SALPETRIÈRE, all canvases with medical subjects. In fact, Lafenestre believed that Laurent-Gsell's arrangement of the number people in his canvas superior to Brouillet's resolution of the same compositional problem. Laurent-Gsell was much wiser to limit the number of people in the painting and to make them appear more interested in what was taking place around them. "The research of a more severe setting and of an more marked intellectual

expression highlights a third medical canvas, LA VACCINE DE LA RAGE, in the laboratory of M. Pasteur by M. Laurent-Gsell. The lighting is completely provided by a light of the current style, background lighting which, in curling around the profiles of the people, easily makes them leap out of the more or less opaque background and surrounds them in a clear and shining beam. But his light is even filtered better and more finely distributed. The people, less numerous and more attentive, are more seriously interested in the action than in Monsieur Brouillet's work. They therefore interest us more." [120]

Albert Wolff saw that Laurent-Gsell's painting marked an important step in the creation of the new style of doctors' portraits. Wolff, like Lafenestre, discussed the painting in the same section of the article in which he analyzed the medical scenes by Gervex and Brouillet. These were the modern portraits. "Dans le meme ordre d'idées et à un niveau plus modeste, je cite encore l'ouvrage d'un jeune homme d'avenir. M. Laurent-Gsell, qui nous conduit dans la clinique de M. Pasteur, ou l'on inocule la rage à un enfant. En ces tableaux s'incarne le courant tout moderne de nos portraitistes, et c'est pour cela que j'ai du m'y arreter avant tout." [121]

FIGURE 134 - EMILE BAYARD SEANCE D'INOCULATION CONTRE LA RAGE A' L'ECOLE NORMALE SUPERIEURE

Pasteur's rabies clinic was the subject of another painting by an artist who frequently sent his work to the Salons, although he had not sent this one. Emile Bayard's gouache, SÉANCE D'INOCULATION CONTRE LA RAGE A L'ECOLE NORMALE SUPERIEURE (1886) is currently at the Pasteur Institute, on display in the first floor vestibule. It is a crowded scene, containing at least thirty people. Neither Pasteur, who stands at the left holding the list of patients, nor Dr. Grancher who sits at the right carrying out the vaccinations is the center of this three-part scene. The patients, especially the Russians who have come after their village had been attacked by a wolf, stand in the very middle of the composition.

Some of elements in Laurent-Gsell's depiction of Pasteur's laboratory match those in Bayard's - Pasteur holds his clinic notes, Grancher inoculates, well-dressed ladies and gentlemen observe, patients from around the world dressed in easily identifiable clothing - but there are major differences between the two works. In Laurent-Gsell's canvas, Pasteur stands directly next to Grancher and closely observes the inoculations which take place in the middle of the room. The visitors, both men and women, seem genuinely interested; some of the observers are most probably

physicians. In Bayard's, the visitors do not approach Grancher or the patient about to be inoculated. They remain at the left and seem only marginally interested in the proceedings. In Laurent-Gsell's painting, the light which falls on the young patient, on Grancher and Pasteur enters through the one bay of windows at the rear. Bayard's canvas is filled with light which enters from several large windows. Does either painting more accurately portray the actual scene at the rue Vauquelin, the annex to the E.N.S. Pasteur established as his rabies clinic?

An English physician, Dr. Alfred J. H. Crespi, who had paid a visit to Pasteur's laboratory, "at the time when Pasteur's treatment against hydrophobia was attracting most attention," published his eye-witness account. [122] "My object," he continued,

> was not to take patients in danger or supposed danger of hydrophobia, nor to collect statistics, still less to strengthen any theory: it was simply to see what was actually taking place - to observe the man and his assistants, and to report upon and to converse with the people whom I found in his rooms; in short, I was only to be a spectator, nothing more, though my long experience of hospitals and private medical practice gave me some claim to rank as a trained observer, less likely than some other inquirers to be led astray by prejudice and falsehood....So much has been published about M. Pasteur, and his methods of treatment are so widely known, that all I could attempt in my visits to his rooms was to observe curiously anything I saw" [123]

This disclaimer was a bit disengenuous since the visit was organized and supported by Rev. R. A. Chudleigh and other British anti-vivisectionists. Further on Crespi wrote, "Though I have seen hundreds of dog-bites, I have never seen a case of hydrophobia, and I have not known more than two or three medical men who had seen cases....As for the value of the treatment, that seems more doubtful than ever. The injection does not appear to me produce any local or constitutional disturbance, and so cannot, as far as I can understand, neutralise or destroy any virus in the system." [124] Despite his bias, Crespi has given us a fairly detailed description of the day-to-day operation of the rabies clinic. It deserves to be quoted at some length.

> Arrived in Paris, having already introduced myself to Pasteur by some correspondence, I made my way to 14 Rue Vauquelin; and having passed through a plain wooden door into a narrow paved yard, I found two other doors to my left, and on inquiry was told that they opened into the waiting-room. The sight that met me was very similar to that in any out-patient room in a large general hospital in England, with this difference, that whereas in an English waiting-room many of the sufferers look very ill and are dirty, depressed and ragged, those in Pasteur's entrance-hall were mostly clean, well dressed and cheerful, and among them were many persons, whether spectators or patients I could not always ascertain, evidently of good social position.
>
> Much animated conversation was going on, and people were laughing merrily. At the end of the room, to the left, was a wooden railing separating a smaller room or recess from the larger, and as a large crowd was collected there I made my way to it, and found a young man calling over a list of numbers and names;

with some difficulty I reached the barrier and attracted his attention. I told him who I was, and asked to be taken to M. Pasteur; the clerk simply pointed to a very short man at his side, weraring a smoking-cap and said: 'There is M. Pasteur; pray speak to him.' Accordingly I passed through the gate, and advancing to M. Pasteur handed him my card; he glanced at it and remarked: 'Would you wait till the doctors arrive? Pray take a seat in the large room yonder.'...I had a singularly favourable opportunity of observing Pasteur in the meantime. He is short, stout, and elderly, with nothing striking in manner or appearance; he seemed worried, preoccupied, and busy; he is slightly lame, and his sight is bad, while, like most Frenchmen, according to my experience of them, he is extremely reserved. After a time, on the arrival of the physicians, I passed throught the barrier and the small room into a large inner one, where I found many people, - a quiet, orderly, animated, well-dressed throng, a few patients, but the majority visitors or inquirers like myself. One or two assistants marshalled the patients and conducted them to a medical man sitting in a chair; to the doctor's left was a table, on which were placed a dozen small vessels like custard glasses, containing the virus, a lamp, with a vessel of boiling water over the latter, and a few fine hypodermic syringes. The assistant received the syringe from the doctor, rapidly washed the needle in boiling water, filled the reservoir with the virus, and handed it to the doctor, who very expertly injected the contents under the skin of the patient's side....The operator having returned the empty syringe to the assistant, the patient passed out through a door behind the surgeon.

...The process was rapid, and scores of people came in quickly, were operated on, and passed out. I was struck by the admirable order which prevailed, the calmness and good behaviour of the patients, and the noiselessness and rapidity with which, when the injections were over, they filed out. An English out-patient surgery exhibits more noise and confusion, and less work is done in the same time....Underlying the bustle of activity real work was being done, methodically, promptly, and perfectly.

Two or three of the very few dirty, shoeless people I saw during my stay in France were in the rooms of

M. Pasteur, and they were not French.

All this time M. Pasteur was moving about, briefly speaking to his assistants, or addressing a couple of words to strangers. An inner room room led out of the large operating one, and there I found a surgeon busily engaged dressing wounds, some of them of great severity. He dextrously removed the dressings, put a little powdered iodoform on the wounds, then a pad of carbolised cotton wool, a little fine gutta-percha tissue, and finally a gauze bandage over all. This man was large of person, cheerful of countenance, and remarkably rapid in his manipulations.

There could be no doubt that a large proportion of the patents had been bitten, and some seriously; a Russian lad had had his right leg so severely lacerated, that a certain porportion of deaths might be expected in 500 cases of injury.

There did not seem any great air of seriousness among the patients and spectators; indeed I suspect that many looked on the whole thing as a joke; a small one, it may be, still a joke.

As M. Pasteur invites inquiry and criticism, I suppose that matters could not be altered; still there was an appearance of something like a show in the proceedings and place that would wear away should the laboratory remain open for years. Many of the aristocratic gentlemen and graceful ladies who passed through the rooms were evidently come to look round, just as they might, later in the day, go to a flower show, or a picture gallery....

On my second morning in the rooms matters went on much the same. I noticed a dark man of fifty, whom I cross-examined. He was a physician from Cairo, sent to Paris to investigate the matter....Among the patients were two foreign women - one tall, the other short, both singularly handsome. 'What are these people?' I inquired. 'One,' he replied, 'is an Arab; the other I don't know.' The short woman whom he had called an Arab heard him, and politely begged his pardon, disclaiming any Arab blood. She and her tall compainion were Spaniards....Among the visitors there was another tall man, with gold-rimmed spectacles....He was a Brazilian physician, investigating the subject preparatory to opening a

similar institute at Rio. [125]

Crespi described Dr. Grancher as "a tall, slight, bald man of forty, extremely able and gentlemanly...."[126], but quoted a description of Grancher's work from the FORTNIGHTLY REVIEW rather than write his own. It is not unlikely that Crespi wished to criticize Pasteur's operation, but did not want to be seen as the author of the criticism.

> Doctor Grancher, through whose medium Pasteur operates, enters and sits down in an arm-chair in the recess of the northern window facing the doors. A side light from a western window falls on his face. On his left is a table with ten glasses, containing a substance which looks like starch, but is a peptonised gelatine, having it it nine different degress of tamed virus, and the rapid poison in its pristine strength. No. 1 is the weakest, No. 10 the most potent. The doctor is middle-aged and slender, bald, sandy-haired, self-possessed, pale, has a Mephistophelian profile, and never by any chance says a word to anybody. His air is one of utter indifference. He is merely Pasteur's authorised medical instrument. But under his indifferent manner keen watchfulness peeps out. His hands are in black kid goves, which on sitting down he carefully examines to see there are no holes. The doctor operates on all - the scrofulous, consumptive, scabby, the healthy, the young, the old, the maiden, the child, the gallant soldier, &c. &c., with the same hypodermic syringe. He does not wash it between the inoculations, or the categories of inoculations. Each patient, on coming up to him, bares his or her abdomen. The ladies have ingenious contrivances to avoid indelicate exhibitions. Nevertheless, some of them redden like peonies, and others all but cry. Grancher pays no heed to their blushing, nor to their welling-over eyes, and operates as if they were anatomy-room subjects. He takes a bit of the abdominal flesh between a finger and thumb, drives slantingly down under the skin the needle, and injects. This syringe is an elegant little instrument like a case pencil. There are

> little instrument like a case pencil. There are times when his eye, it seems to those who watch him, expresses scoffing scepticism. It seems to say Tas d'imbeciles. He is not in Pasteur's secret. This contemptuous glance may perhaps be explained by the fact that the crowd emits a worse odour than a collection of old and freshly worn shoes. French and Belgian peasants are clean and neat, but lower order Spanish, Portugese, and Russians are dirty to a loathsome degree. The Kabules have a passion for clean linen and cold water, and never fail to wash their feet under the tap of the Ecole Normale. [127]

It is clear that the correspondent for the FORTNIGHTLY REVIEW did not describe what he supposedly observed. Pasteur strictly followed "Listerian" principles (acknowledged by Lister to be based on Pasteur's discoveries). He advised some Russian doctors to follow his own methods and to be sure that all their instruments - syringes, scalpels, etc. were perfectly clean. "Vous pourriez peut-etre laisser se glisser votre bacille dans vos moelles de vaccination et que de grands malheurs en pourraient etre la consequence." [128] Pasteur would not even sit down to eat dinner without scrubbing his hands.

Between late 1885 and April, 1886, Pasteur and the anti-rabies vaccine were the subjects of many illustrations in Parisian journals. Some of there were prints of photographs, some were even caricatures. In general, they lauded Pasteur and his work, although a few were unflattering. Most often the illstration

referred to the anti-rabies vaccine and the clinic, with patients both seeking a preventive dose or a treatment after having been bitten. The laboratory or the experiments undertaken in it were much less frequently illustrated. Although not a medical doctor, Pasteur was often depicted holding a syringe. LE GRELOT, which had been critical of Pasteur during the outbreak of cholera at Toulon in 1884, continued to print satirical images of him. Pasteur appeared on its cover of November 8, 1885 about to inoculate three "rabies victims," Henri Rochefort, Emile Zola and Granier de Casagnac. His vaccine was able to "cure" many illnesses, including those of the literary or political kind. On the other hand, LE BON PASTEUR, a very positive image drawn by Uzes, appeared in LE COURRIER FRANCAIS in 1885. Pasteur, the Good Shepherd complete with halo, protects the "petits enrages." He is a gentle giant who calmly holds his scepter (i.e., syringe) in his right hand and cradles the little rabies victims with his left arm. Gilbert-Martin's illustration, L'ANGE DE L'INOCULATION (M. PASTEUR) gave Pasteur angel's wings. A series of drawings by Renouard appeared in the English journal, THE GRAPHIC, on April 3, 1886. At the center, Pasteur examines a young English girl. Five other English patients who

FIGURE 135 (UNSIGNED) - MONSIEUR PASTEUR ET LA RAGE

LE BON PASTEUR

Laissez venir à moi les petits enfants.

FIGURE 136 - UZES LE BON PASTEUR

LE DON QUICHOTTE

L'ANGE DE L'INOCULATION (M. PASTEUR), par GILBERT-MARTIN.

FIGURE 137 - GILBERT-MARTIN L'ANGE D'INOCULATION


L'ILLUSTRATION

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LES RUSSES EN TRAITEMENT CHEZ M. PASTEUR

FIGURE 138 - (UNSIGNED) LES RUSSES EN TRAITMENT CHEZ MONSIEUR PASTEUR

M. PASTEUR'S EXPERIMENTS IN PARIS FOR THE CURE OF HYDROPHOBIA—THE DOCTOR AND SOME OF HIS PATIENTS

FIGURE 139 - (UNSIGNED) MONSIEUR PASTEUR'S EXPERIMENTS IN PARIS

bottom left of the page, and the rest of the illustration shows nine Russians who had bitten in February. Except for the English girl, the names and ages of all the patients were noted by the artist. Some of Pasteur's Russian patients are wearing clothing very similar to that in Bayard's painting. THE GRAPHIC's illustration called Pasteur doctor and showed him "examining a young English girl, one of a family of four, bitten by a mad Newfoundland dog." A photograph by Pierre Petit which now hangs on the first floor hallway at the Pasteur Institute in Paris shows Pasteur in 1886, seated in front of his clinic with five young patients and their nurses. One youngster has been bitten about the face and his head is still swathed in bandages. Pasteur was an early supporter of an alliance between France and Russia and kept close contact with Russian doctors. On July 17, 1888, he wrote to his diplomat son, "Combien il est a souhaiter cependant que l'Empereur de Russie ne change pas sa politique de ces derniers annees! Cette attitude du tsar est notre sauvegarde et cette attitude, toujours prete a se transformer en alliance, n'est-elle pas commandee par cette circonstance qu'il est d'un supreme interet pour la Russie que la France soit forte et respectee." [129]

FIGURE 140 - PIERRE PETIT PASTEUR, PATIENTS AND NURSES (PHOTOGRAPH)

FIGURE 141 - (UNSIGNED) LA VACCINE DE LA RAGE
LUTTE DU BERGER JUPILLE AVEC UN CHIEN ENRAGE

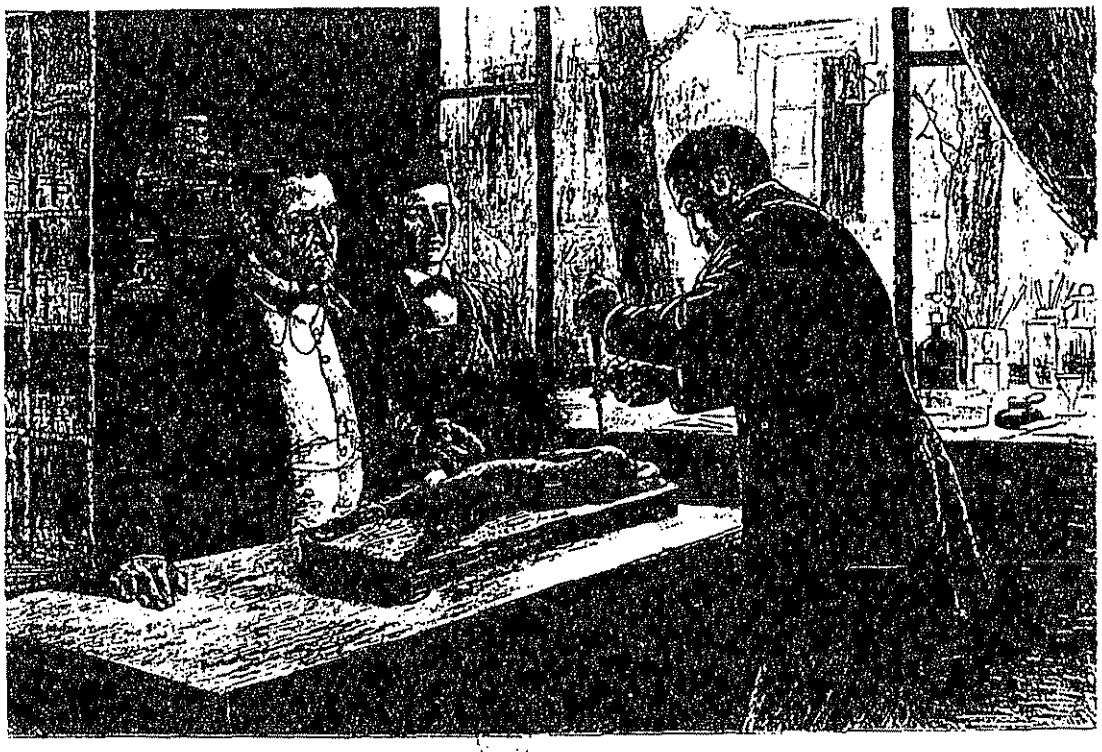
Pasteur's second patient, the shepherd lad Jupille, was also celebrated as a hero in several illustrations in the same period. LA VACCINE DE LA RAGE LUTTE DU BERGER JUPILLE which appeared in L'ILLUSTRATION of November 7, 1885, showed him facing the danger of the rabid dog directly. But Jupille was also the stoic hero of Pasteur's experimental inoculation administered by Dr. Grancher. Jupille's combat with the dog was the subject of two different sculptures exhibited at the Salon of 1887. One by Emile-Louis Truffot (#4554: LE BERGER JUPILLE) was explained in the Salon Catalogue, "il terrassa alors le chien en le saissisant a bras-le-corps, puis, avec la laniere de son fouet, il lui entoura le museau de maniere a le rendre impuissant, et l'assoma avec un des ses sabots." A second group by Athanase Fosse (#3965: LE BERGER JUPILLE LUTTANT CONTRE UN CHIEN ENRAGE), received greater recognition, and was purchased by the city of Paris for 3,500 francs. Fosse was in fact commissioned to make a bronze version of the statue for which he received 2,000 francs. [130] In a letter of October 18, 1887, Pasteur wrote to Grancher about about the statue, which describes only as "the Jupille group showing the young Jurassian putting the mad dog to the ground. He thought it would be placed in front of the Pasteur Institute. [131] Art

FIGURE 142 - DR. GRANCHER INOCULATES JUPILLE

made up a large topic in this letter. Pasteur informed Grancher that he had just been to Carolus-Duran's studio where he had seen a painting of a seated woman, "fort elegante dans sa nudité absolue." The artist planned to give it to Grancher in return for the care the doctor had given his son who had been bitten. "I said to him," wrote Pasteur, "that you and Madame Grancher would be happy to receive such a gracious souvenir. He is a great artist who earns quite a lot and is well-known." [132] In 1888, Carolus-Duran painted Pasteur's portrait which, having been painted soon after Pasteur's second stroke, made him, according to Rene Vallery-Radot, "ill and overcome with fatigue - as he was at that time. His look is filled with sorrow. But his goodness dominates and lights up those ravaged features." [133] Pasteur also had a painting in his living room at Arbois by an artist, Isambert, showing Jupille fighting the rabid dog. [134]

A drawing, described as drawn from life by A. Gusman, is, I believe, from L'UNIVERS ILLUSTRE. It matches Bayard's canvas quite closely and is evidence that Bayard's canvas is an accurate representation of activity at the rue Vauquelin. The illustration is identified in the Pasteur Institute's archives as Photo

FIGURE 143 - A. GUSMAN LES INOCULATIONS CONTRE LA RAGE DANS LE CABINET DE MONSIEUR PASTEUR



LA VACCINATION DE LA RAGE. — M. PASTEUR INOCULANT LE VIRUS A UN LAPIN. — Voir page 38.

FIGURE 144 - (UNSIGNED) LA VACCINATION DE LA RAGE - M. PASTEUR INOCULAT LE VIRUS À UN LAPIN

Number M/0436/50; Legende>[" Les inoculations contre la rage dans le cabinet de M. PASTEUR" Seance de vaccination en presence de Louis PASTEUR Dessin d'apres nature de A. GUSMAN]; DATE-DOC>[vers 1886-1888]. But a print which appeared in the January 16, 1886 edition of L'UNIVERS ILLUSTRE, LA VACCINATION DE LA RAGE. - M. PASTEUR INOCULANT LE VIRUS A UN LAPIN shows Pasteur in his laboratory observing Roux operating on a rabbit. The similarity of type-face in the legend's of both paintings, however, strongly suggest that they came from the same journal. The scene in shich the rabbit is being trepanned reads "see page 38." In the Gusman print, the legend reads "see p. 231," indicating that it was taken from an edition of a later date.

Another illustration, published in LE JOURNAL ILLUSTRE March 28, 1886, appears similar in several ways to Laurent-Gsell's painting. LA VACCINATION CONTRE LA RAGE UNE SEANCE D'INOCULATION AU LABORATOIRE DE LA RUE D'ULM, by Henri Meyer (print by F. Meaulle) is also described as taken from life. In it, Viala holds the young patient steady as Grancher administers the anti-rabies vaccine. Pasteur observes intently from behind the doctor. The well-dressed ladies and gentlemen (a military officer is visible) block the

FIGURE 145 - HENRI MAYER LA VACCINATION CONTRE LA RAGE

view of the Russian peasants in the background. The table at Grancher's left hold the flasks containing the "custard cups" of vaccine of different strengths. Although resting on a different sort of table, these are the same flasks seen in Laurent-Gsell's canvas. There are differences between the two scenes. Laurent-Gsell's patient is much younger and held by his mother, reminiscent of the young patient in Constant Desborde's LA VACCINE AU CHATEAU DE LIANCOURT (1822), and there are no Arabs in hooded garb, but the crowded grouping surrounding the doctor connects Meyer's illustration to Laurent-Gsell's canvas.

In Laurent-Gsell's painting, the clinic notes have overflowed their basket and Pasteur seems about to add more to the pile. In Bayard's painting, the papers are stacked neatly on the table near Grancher, and the vaccination process appears to have become routinized. Here Pasteur seems only peripherially involved in the action; he directs traffic, whereas in Laurent-Gsell's painting he directs the action. The process was still new. By the time of Bayard's painting it had become routine.

"Rappelez-vous," Pasteur wrote to Grancher on September 4, 1888, "que jadis je n'ai entrepris quelques recherches sur la rage que dans la pensée de

forcer l'attention des medecins sur ces nouvells doctrines, au cas ou quelque donnee medicale pourrait surgir de ces recherches." [135] These popular images of him engaged in rabies' vaccine research were also part of the process by which Pasteur hoped to spread his influence. The images in paintings exhibited at the Salon were to a large degree controlled by Pasteur through his personal contacts and family ties. They increased his fame and the influence of his research throughout the medical profession and to the larger public.

The change in the way Pasteur was portrayed, from pater familias to laboratory scientist influenced not only the way elite doctors would have themselves depicted, but in the way science was represented generally. For example, the decorations for the new Sorbonne, the science facilities in particular, illustrate the widespread change that took place.

Since the first years of the Third Republic, science instruction in France had been undergoing a significant transformation. According to Emile Durkheim, the quality of science education had been permitted to decline during previous regimes, and for its program of national recovery, the republican government emphasized improving the way science was

taught. Durkheim explained that education and science were the two paths that were to be followed.

> It was just after the defeat. All good citizens had only one thought: to rebuild the nation. In order to recover, it was first necessary to teach. A society that hopes to govern itself, needs, above all, enlightened citizens. A democracy would be unfaithful to its principles if it did not have faith in science. [136]

An essential part of the programe for the Sorbonne's renaissance was to be the construction of a new set of buildings. Durkheim noted that "in order to place it at the height of hits new mission, we had to transform it. Every one of the old buildings were razed, except the Church that had been built by Richelieu and in which he had his tomb." [137] In addition to the new Science Faculty, new Medical and Pharmacy buildings were to be constructed. "It was necessary to build a new home for the new being we were creating. The old buildings, built in the seventeenth and eighteenth centuries were not able to provide shelter for this new life that we were proposing to arouse, infinitely more intense and more complex. A transformation was necessary." [138] Commissions for the decorations of the walls of these new buildings were being awarded just at the time the new portraits began to appear. Decorations for the Sorbonne by two artists in particular, Puvis de Chavannes and Leon Lhermitte, illustrate just how the

changed style affected more that just doctors' portraits. They do indicate that there was a delay of a few years between them.

Durkheim's description of the Sorbonne made special mention of the large mural Puvis de Chavannes had painted for its Grand amphitheatre, an allegory to science. "On the back wall above the stage, is a large allegorical composition by Puvis de Chavannes, which has generally been thought of as a master-piece by the artist. Here is the description which he has himself given it:

> In the clearing of a sacred woods, seated on a marble block is The Sorbonne. On her sides are two genies bearning palm leaves. A her feet a spring gushes. Spread apart on the right, standing on the grass, are muses in diverse poses who represent Letters, Eloquence and Petry. History and Archaeology are digging through the entrails of the past. Philosophy is discussing the mysteries of life and death. The Sciences are on the left: Geology, Physiology, Botany, Chemistry are symbolized by their attributes. Physics has her wings half-opened before a swarm of young people who offer her an electric flame as the first fruits of their work. In the shade of a thicket, Geometry thinks about a problem. [139]

Durkheim dies not provide the source of his list. Puvis exhibited the cartoon for the mural at the Salon of 1887, and Thiebault-Sisson, critic for the NOUVELLE REVUE, quoted what he claimed was Puvis's explication of the painting. This list contained a different catalogue of sciences. "'The right portion is

FIGURE 146A - PIERRE PUVIS DE CHAVANNES CARTON DE LA PEINTURE DESTINÉE AU GRAND AMPHITHEATRE DE LA SORBONNE (FRAGMENT)

dedicated to Science. The first group pays suit to the Muses is composed of four figures, Botany, the Sea, Minerology and Geology. Two young people are amazed at these riches, while others, grouped before a statue of Science, are swearing with enthusiasm and as one, to devote themselves to her. -- Three young men, absorbed in study, complete the composition." [140]

Writing in 1889 when the painting was finished, Firmin Javel noted that "Aujourd 'hui, l'oeuvre definitive est visible," and quoted word-for-word the exact same "explication" as had Thiebault-Sisson two years earlier. [141]

What are the differences between the sciences named in 1887 and by Durkheim in 1918? Only two sciences, botany and geology, made both lists. La Mer (geography?) and minerology were on the 1887 list but not that of 1918. On the first list, the young men who promised to devote their lives to science stood before a statue of Science; Durkheim identified the statue as "physics" and the object the youths carried as the flame of electricity. Neither of these was mentioned by Puvis or noticed by the reviewers in 1889. The two other sciences which appeared only on Durkheim's later list, chemistry and physiology, had become central to new medicine, and with the introduction of the

PCN ["N" represented "natural science." RW] degree, prerequisite to medical studies.

In his review of the 1887 Salon, George Lafenestre, also named the sciences Puvis had depicted. His list differs in some details from those already mentioned. Lafenestre wrote that in the right-hand section, Puvis had represented "les Sciences naturelles, Geologie, Mineralogie, Botanique, Physique, Chimie, par des groupes de figures en action, d'signification claire et vivante." [142] But physiology, part of Durkheim's list, was not mentioned by Lafenestre. It is curious that the study of microbes, which had become so important in the 1880s, was not depicted by Puvis and not included on any list.

It is interesting to compare these lists with Louis Liard's inventory of the sciences taught at the Sorbonne in 1870 and in 1892. Liard wrote,

> Open the catalogues of 1870 and those of 1892. In 1870, the Paris Faculty of Sciences was constituted as follows: physical astronomy, mathematical astronomy, higher algebra, advanced geometry, differential calculus, physical mathematics, physics (two chairs), rational mechanics, physical mechanics, chemistry (two chairs), minerology, geology, botany, zoology (two chairs), general physiology....
>
> Here is the situation in 1892. Science Faculty: higher algebra, advanced geometry, differential and integral calculus, calculus of probabilities and physical mathematics, rational mechanics, mathematical astronomy, physical astronomy, physical and experimental mechanics, physics (two chairs),

> chemistry (metals), chemistry (metalloids), organic chemistry, biochemistry, minerology, geology, botany, zoology (two chairs), general physiology. There are also five complementary courses: evolution of organized being, celestial physics, organic chemistry, physical geography, analytical chemistry. In addition, there are twelve assistant professors, three for mathematics, , two for physics, two for chemistry, one for minerology, one for geology, one for botany and two for zoology. [109b]

In Liard's opinion, the list itself reflected the progress that science education had undergone in the brief space of twenty years.

Since Puvis's painting was an allegory, critics claimed that they were more interested in his style than his content. For example, Thiebault-Sisson claimed to admire the work, "d'y retrouver le beau ciel, les feuillages ombreux, les colorations mysterieues qui m'ont charme naguere dans le BOIS SACRE DES MUSES." [144] George Lafenestre, who considered Puvis's painting one of his best, "ce carton, d'ailleurs, qui est peut-etre sa meilleure oeuvre," [145] believed the most important feature of Puvis's work was what he referred to as its eloquence, "comme l'eloquence poetique de Lamartine," [146] and to "la divine emotion de la beaute." [147] Other critics wrote that the emotion in Puvis' work compensated for a number of errors he had made in its composition and anatomical representation. "The ingenious arrangement of all these allegorical figures would not be able to

move us and would only have a literary merit if the had not constantly emphasized the the delicacy of his idea by the superior qualities of his execution....In spite of the stiffness and the twists in it, nowhere else is Puvis de Chavannes' talent less equalled." [148]]

In the early 1880s, Puvis had been considered one of the most influential and creative artists in France. In 1883 Henry Houssaye, critic for the REVUE DES DEUX MONDES, wrote that at the Salon, "On n'y trouve point les equivalens du LUDUS PRO PATRIA de M. Puvis de Chavannes ou du BARRA de M. Henner." [149] Houssaye honored Puvis's work again at the next year's Salon. Reviewing the canvas Puvis exhibited in 1884, LE BOIS SACRE, Houssaye wrote, "Croyez que si M. Puvis de Chavannes reussit a formuler sa pensee avec les procedes de son art et a nous communquer l'impression profonde du sentiment qui l'a inspire lui-meme, c'est qu'il sait parfaitement son métier."[150]

Thiebault-Sisson admired Puvis's allegory which seemed to leave science in the shade, unexplained and mysterious. Such an idealization of science, however, had begun to leave many observers unsatisfied. They began to express a preference for the concrete images of science and scientists at work they had seen at the Salon. Toulouse-Lautrec's parody of Puvis' BOIS

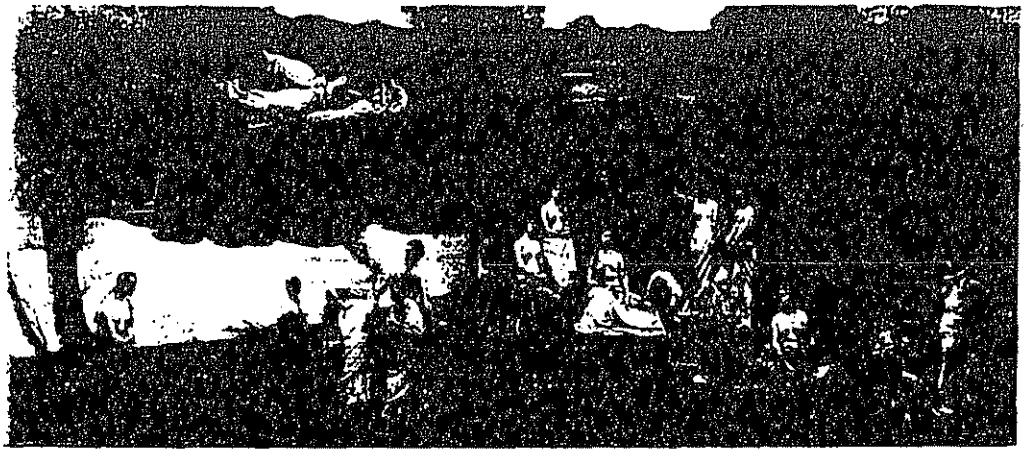


FIGURE 146B - PUVIS DE CHAVANNES THE SACRED GROVE

FIGURE 146C - HENRI DE TOULOUSE-LAUTREC PARODY OF THE SACRED GROVE

SACRÉE appeared in 1884. In 1890, the Salon reviewer for the UNION MEDICALE, wrote that Puvis' painting of that year and destined for the Rouen Museum, "leaves us cold. Medicine probably holds a place in the large canvas of the artist, which is to be sent to the Rouen Museum. We say probably because Monsieur Puvis de Chavannes's allegories are often so cloudy that are not very sure of our attributions. Some people who have never lives walk gravely in a Normandy that is as little like Normandy as possible. It isn't green and the trees aren't apple trees." Now, as one of our most eminent art critics has said, the Puvis de Chavannes is poetry and the world never achieves the heights of poets." [151]. In the review of the 1892 Salon, Noreck renewed his criticism: "Que dire de L'HIVER de M. Puvis de Chavannes? que c'est parfait, sublime pour les uns et que les autres n'y comprennent rien?" [152]

The idea that allegories were no longer suitable to represent either science or medicine was made explicit for at least one group of visitors to the same Salon by Dr. Norech in his review of a painting commissioned by the Lyon Faculty of Medicine but exhibited first at the Salon. "Mlle. Cornillac has exhibited at the Champ-de-Mars a PANNEAUX DECORATIF POUR LA FACULTE DE MEDECINE DE LA VILLE DE LYON. The

arrangement is broad, the drawing sure and the portraits of our Lyonnais colleagues sufficiently resemblant. Unfortunately, young women dressed in the style of ancient Greece when placed next to men in severe formal jackets, always have a strange effect. But this is the fault of the genre itself and it is not up to the painter to avoid it." [153]

Leon Lhermitte's paintings for the new Sorbonne provide a striking contrast to Puvis de Chavannes' allegory of science. In 1886, Leon Lhermitte was awarded a commission by the state to paint several canvases to decorate the new buildings. Lhermitte called the first of these paintings simply CLAUDE BERNARD and explained it in the catalogue for the 1889 Salon as a "Panneau destiné à la decoration de la grande salle des commissions de la Faculté des Sciences a la Sorbonne." [153b] Currently located at the Academie Natioanale de Medecine in Paris, it is identified there as "Claude Bernard dans son laboratoire." According to Albert Wolff, the painting was one of the most popular at that year's Salon. Even years later, critics still regarded the painting, by then installed at the Sorbonne, "un des meilleurs morceaux dont notre art ait contribué à decorer l'edifice." [154]

FIGURE 147 - LEON LHERMITTE CLAUDE BERNARD

Lhermitte's painting shows Bernard in his laboratory at the College de France. Bernard is demonstrating an experiment on a live rabbit to the men who surround him. They are: Nestor Grehant, Amedee Dumontpallier, Louis-Charles Malassez (seated), Paul Bert (facing Dumontpallier and Grehant), Jacques-Arsene d'Arsonval, a young laboratory assistant, Claude Bernard (in apron), another laboratory assistant "Le pere" Lessage, and Albert Dastre. George Lafenestre called the painting, CLAUDE BERNARD ENTOURÉ DE SES ELEVES. [155] Although at one time they had been his students (d'Arsonval had been Bernard's preparateur at the College de France) in this painting they are shown in their maturity, eminent scientists in their own right. Dastre, for example was a member of both the Academy of Science and the Academy of Medicine. He had his own biology laboratory at the Sorbonne; d'Arsonval had achieved some renown for his work using electricity to treat certain illnesses ("Darsonvalisation"). Paul Bert succeeded Bernard to the chair of physiology at the Sorbonne. At first it may seem odd that the only "students" in this painting destined to decorate the new university are eminent scientists. But by reminding us that these famous scientists who surround Bernard were his students, Lhermitte's painting has

elevated Bernard to the highest place, and has reminded the viewers of the primacy of the experimental method. It also confirms the Faculty's place in French science. It is not without significance that the scientists in the painting had started their careers as doctors and chose science as a higher calling.

In his article, Wolff referred to the painting as "La Leçon de Claude Bernard," [156] an interesting choice. Although he does not indicate why he chose the word "lesson," it may be that he had in mind the paintings by Feyen-Perrin's (ANATOMY LESSON OF DR. VELPEAU) or the more recent Brouillet's of Charcot (LA LECON CLINIQUE A LA SALPETRIÈRE). Wolff may have believed that the purpose of Lhermitte's painting was in fact one way for the science faculty to respond to Charcot.

Even those reviewers who held some negative views about the canvas expressed their admiration for Lhermitte's realism and accuracy. For example, although Valentine Claudius Jacquet considered the portraits a bit too sombre, he admired the work. "M. Lhermitte avec son CLAUDE BERNARD aux personnages patiemment etudies, fortement rendus, mais aux tons un peu sombres et comme salis de fusain." [157]

In the GAZETTE DES BEAUX-ARTS, Maurice Hamel

wrote that Lhermitte had not handled light very well, but the painting's merit was to be found in its exactitude. "In bringing together in Claude Bernard's laboratory, surrounding the professor, his friends and his disciples, Lhermitte has logically arranged a group or portraits tied together by commonly held thoughts and which would have been more natural if each person was not making such an effort to be so. The work is interesting, documented exactly, but with a weak and unsure hand. The light remains a rebel to the artist's conscientious efforts and unfortunately it haunts him." [158]

Pierre Gauthiez's review in L'ARTISTE, praised the work, which he said was one of the few "tableaux de corporation" at the Salon. Its accuracy reminded him of similar scenes he had personally witnessed at both the Sorbonne and at Paris hospitals. "Wisely ordered, with a sober and broad light, it encloses into a quite harmonious group a series of portraits which speak truthfully. At the time when our professors poured over us the first drunkeness of that natural science that was so captivating and fecund, I remember having seen whether at the amphitheater or at the lycee, at the Sorbonne or at the hospital, nearly all these masculine faces enlightened by the same

thoughts. " [159]

L'ART FRANCAIS made only the briefest mention of the painting in its guide to the Salon. Nevertheless, its short notice managed to praise the painting strongly. "Salle 27. M. Lhermitte, a qui etait confiee la tache de faire revivre dans une composition importante, l'illustre Claude Bernard, s'en est acquitte victorieusement." [160]

Writing for his medical colleagues, Doctor Norech of the UNION MEDICAL, described Lhermitte's painting as "une belle peinture qui fait honneur a son auteur." [161] Norech remarked that the painting had taken on a more scientific look by giving prominence - perhaps too much prominence - to the equipment in the front. In front of Dastre, for example, clearly visible on the table at which he is taking notes of the experiment, is Bernard's microscope. For Norech, these instruments should have remained secondary features of the painting. It may seem somewhat surprising that Norech, so critical of the doctors' paintings by Gervex and Brouillet, should have praised this painting. Lhermitte's painting does not, of course, show a doctor at work and perhaps as important, Claude Bernard had already been dead a number of years. Norech may have wanted to affirm that the science faculty had

contributed more to medicine than those elite doctors and surgeons at the hospitals. Norech did, in fact, have some critical words for the painting, but his criticism was reserved for Lhermitte's representation of Bernard's (still living) students. Dastre, for example, was only forty-five years old in 1889 and d'Arsonval only thirty-eight. Norech admitted that the portraits of Bernard's "fideles disciples" were indeed fine but, perhaps they distracted the viewer's attention away from the central figure. "But this is only a minor criticism an one would only have wished that all the panels destined for the Sorbonne would have been so interesting." [162] This was a not very disguised reference to the Sorbonne's decorations by Pierre Puvis de Chavannes.

Paul Leroi made his comparison between Lhermitte's and Puvis's work explicit. For Leroi, Lhermitte's realistic representation was a welcome change from Puvis' outdated style. "Room No. 27 is even shared more liberally. It not only possesses LES LAVEUSES by Monsieur Leon Lhermitte, but also his CLAUDE BERNARD destined for the Committee Room of the Science Faculty at the Sorbonne and which will produce a great effect there. Early on, here is what is truly modern, clean, clear, sincere, eloquent without emphasis, simple and

true, French in its essence and completely free of that chronic anemia of drawing and perspective, of modelling and of color with which Monsieur Puvis de Chavannes has infected the entire school. Happily, Puvism is in the process of becoming outdated. This year, the Salon is much less flooded with his lamentable pastiches." [163]

According to William Schupbach, there is no record of how the work was commissioned or who actually chose which of Bernard's experiments would serve as its subject. Schupbach also poses several other unanswered questions: "Who selected the persons portrayed? What sources did the painter use to portray them as they would have appeared twenty years before? Who chose the experiment and set up the apparatus? The person responsible, whoever he was, seems to have chosen the experiment with particular care." [164] Schupbach noted that Lhermitte's painting was a very accurate illustration of an experiment that Bernard considered one of his most important, not only for what it showed about the effects on body temperature of cutting the rabbit's sympathetic nerves, but also because it was a model of the experimental method. "The fact that Bernard himself cherished this experiment for its methodological virtues," wrote Schupbach, "would have recommended it as the subject of an official memorial."

[165] The authors of the ALBUM GONNON identified the canvas with a quite different title, LA LECON DE VIVISECTION, one which has changed the focus of the painting. In doing so, however, the ALBUM GONNON ignored both the actual setting of the experiment and its representation in Lhermitte's canvas. It was not an amphitheater or lecture hall. It is set in Bernard's crowded laboratory. The author of this article transfers the scene to the medical faculty. "...Like Millet, [Lhermitte] procedes solely from the constant observation of life. But...he has not simpy desired to render life as lived in his canvases. He has hoped to enlarge it up to a generalization....LA LECON DE VIVISECTION being done by Claude Bernard gives a general idea of all the amphitheaters at the Academy of Medicine where one finds the professor teaching, his students surrounding him, one or two laboratory assistants and the demonstration table." [166]

John Lesch points out that Bernard's animal experiments marked a turning point in his career. "Juxtaposition of Magendie's later work on the nervous system with Bernard's research in the same area over the first ten or twelve years of his scientific career shows that at least until 1853 Bernard did not diverge significantly from the patterns set by Magendie. He

did not move away form a focus on human physiology....If there was a divergence worth noting,...in part, it was expressed in Bernard's greater emphasis on the leading role of animal experiment vis-a-vis pathological experience or comparative observation, a shift clearly associated with his move away from medical practice. The same emphasis was reflected in the official program of the new Societe de Biologie, in which Bernard shared vice-presidential responsibilities with Charles-Phillipe Robin." [167] In other words, the painting did not simply signify the triumph of the experimental method. By choosing the experiment which marked Bernard's shift finally to research, it emphasized the split between clinical practices and pure scientific research. The painting also glorified the university laboratory rather than the hospital as the center of modern medicine. It would thus seem not unlikely that the university's decoration commission rather than Lhermitte himself selected the painting's subject.

Claude Bernard had already been represented in traditional portraits. The year Claude Bernard died, 1878, August-Charles Mengin, a student of Cabanel, had exhibited CLAUDE BERNARD, DE L'ACADEMIE FRANCAISE. [168] The reviewer for L'ARTISTE praised

the portrait, in which the artist "reproduit avec talent la figure finement pensive du modele....On reconnaitrait, sans l'aide du livret, que c'est la l'image d'un savant et d'un philosophe; et c'est une heureuse idee que celle d'avoir fait porter la lumière sur ce front bombé, plein de travail et de reflexion." [169]

Lhermitte exhibited the second of his two Sorbonne commissions, a portrait of the chemist, Henri SAINTE-CLAIRE DEVILLE, at the Salon of 1890 [170]. Although Lhermitte portrayed his subjects accurately, he seemed to have a problem handling light. Several critics commented that the painting seemed too dark. Ernest Hoschede wrote that it was "equal in interest to his CLAUDE BERNARD. The people who surround them, students or scientists of all types, are grouped with much intelligence. It is 'tres bien fait,' as they say; but it is not of greater interest than a large charcoal drawing. These large canvases lack air. Everything seems to be living under a disagreeable looking brownish glass; it is old and lacks freshness." [171] A similar criticism was expressed by the REVUE DES DEUX MONDES' critic, Georges Lafenestre. Although he called the painting, "the best group portrait" at the Salon, and that "la scène est bien disposée," [172]

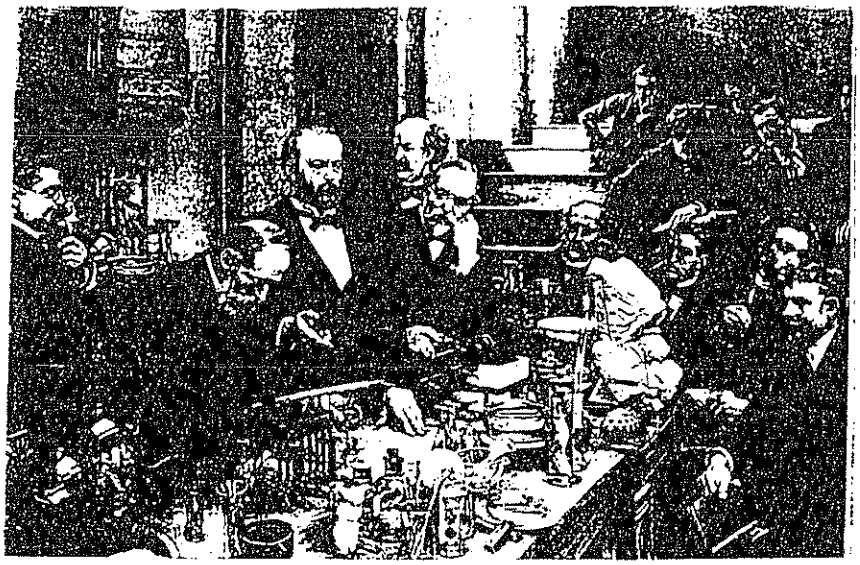


FIGURE 148 - LEON LHERMITTE PROFESSEUR SAINT-CLAIRE DEVILLE

Photo Nadar

HENRI SAINTE-CLAIRE DEVILLE (1818-1881)

FIGURE 149 - NADAR SAINTE-CLAIRE DEVILLE (PHOTOGRAPH)

and the strength with which way he painted the heads "solide, avec force et ampleur." [173] He wrote that "it is unusual that M. Lhermitte, being above all else a landscape artist, whose life is in the fields, errs precisely by a certain dryness in the distribution of his light." [174] Norech's very brief notice in the UNION MEDICALE was mildly favorable "La composition de l'ensemble est agréable et les tetes fort ressemblantes...." [175]]

The men around Saint-Claire Deville are, from left to right, Alfred Ditté (1843-1908), Paul Hautefeuille (1836-1902, leaning forward), then Sainte-Claire Deville (1818-1881), H. Debray (1827-1888), L. Troost and Alexandre Joly (1845-1897). A group students observe the experiment and take lecture notes. This painting was also commissioned in 1886, five years after Sainte-Claire Deville's death. The scientists are dressed in suits rather than in laboratory jackets or aprons, the table is crowded with scientific equipment and the bleacher-style seats from which the young science watch clearly sets the scene in a a lecture hall rather than in a laboratory. The experiment involves aluminum, Saint-Claire Deville's special interest. As the writer of the ALBUM GONNON's piece about the painting noted,

> Everyone who was watched the development of science since 1830 through the end of the Second Empire knows the reputation of this great chemist and learned professor who was Henri Sainte-Claire Devill, if only for the joy of schoolboys (which we were) around 1860 who received their first pocket watch of gilded aluminum. I still remember the 'greats' who revealed to me the name of Sainte-Claire Deville as the inventor of my watch's case.
>
> And in fact, if he wasn't the inventor, he was its protagonist, since before him Woeler's discovery of aluminum in 1827 remained in the demain of pure science. It hardly had left the laboratory until 1855 when Sainte-Claire Deville's aluminum ingots were, one can even say, the main attraction of the first Universal Exposition. It was, then, due to his patient research that one can use this very precious metal, whose lightness rends so many services to modern industry. [176]

Aluminum, a metal newly discovered in the nineteenth century, was a striking symbol of modern science and technology.

From time-to-time, Henri Saint-Claire Deville had also taken part in medical research. In 1865, for example, he was part of a research team that included Claude Bernard and Louis Pasteur, investigating the outbreak of cholera that year. In July, 1883, at the time he was renewing his research into cholera, Pasteur recalled the events for the editors of the journal, LE VOLTAIRE. Pasteur noted far medical science had progressed since the 1860s. At that time, he and Saint-Claire Deville had tried to discover whether cholera was an air-borne disease.

> Since the last cholera epidemic, science has made great progress concerning transmissible diseases. All of these illnesses have been the object of deep study and have shown themselves to biologists as been the product of a microscopic being which develops in the bodies of humans or animals and produce there the devastation which is most often fatal. All the symptoms of the illness, all the causes of death are directly dependent on the physiologic properties of the microbe. Only a short time ago, we were very far away from these ideas. At the time of the cholera epidemic of 1867-1867 in Paris these new ideas had not been acquired by science, my illustrious teacher Dumas established a commission of which I was a part along with my friends, the regretfully departed Claude Bernard and Henri Sainte-Claire Deville. We made several studies of this illness. We made them according to the ideas that were suggested to us by the state of science at that time. I can still me installed, along with Monsieurs Dumas and Deville, in the attics of the Lariboisiere Hospital, above a room of cholera patients. We made use of an opening in one of the ventilation channels that communicated with the room. We placed through this opening a glass tube surrounded by a refrigerant mixture in order to collect and condense in it as much as possible of the products of the air in the room. In the laboratory at the Ecole Normale, Monsieur Dumas asked us to make a chemical analysis of the blood of one of the cholera patients. Claude Bernard pointed out the interest that research comparing the minerals in the blood of a cholera patient with normal blood would have. How things have changed today! Who is the physiologist who, in order to study the nature of cholera, would follow such a line of research? [177]

Leopold Mabilleau, critic for the GAZETTE DES BEAUX-ARTS, noted that before the painting reached its final destination and placed before "specialized" viewers, the Salon was a suitable place to exhibit the painting, for its visitors were what Mabilleau called, "the enlightened public." "Monsieur Lhermitte

represents, to a degree even more obvious, the enlightened public which includes the public of the year 1890 -- I mean the enlightened public which attends these expositions and admits that the most well-known and esteemed artists have come to terms with those of the new school. Each knows itself willing to in no way be closed to the ideas of reform and of progress, to remain sensitive to every aspect of beauty and in its boldness, to feel reassured by the solidity and seriousness of this art. To speak truthfully, it is exactly that the painting of TODAY, which neither breaks from YESTERDAY nor anticipates TOMORROW. This is not slender praise, if one takes it in its best sense, as I have made it, and I do not know of any other artist about whom it is more suitable. [178]

Paul Leroi thought that overall, the CLAUDE BERNARD was superior to the SAINTE-CLAIRE-DEVILLE. "Monsieur Lhermitte, whom I like very much, troubles me. His SAINTE-CLAIRE DEVILLE is certainly less controlled than his CLAUDE BERNARD of the previous year. It is nonetheless one of the best pages of this exhibition." [179]]

Artist who continued to represent science allegorically rather than realistically even after the exhibition of Lhermitte's portraits of Claude Bernard

and Saint-Claire Deville suffered the criticism of Salon reviewers. Mlle. Cornillac's 1892 decoration for the Lyon Faculty mentioned above was just one example. Albert Besnard also painted one for a public building in Paris. At the Salon of 1890, Besnard exhibited LA VERITE, ENTRAINANT LES SCIENCE A SA SUITE, QUI REPAND LA LUMIERE SUR LES HOMMES, commissioned for the ceiling of the Salon des Sciences of the Hotel de Ville in Paris. Some critics mentioned Besnard's allegory directly. Others made their criticism more oblique. J. Buisson was surely thinking of Besnard's work when he wrote about the SAINTE-CLAIRE DEVILLE, "This painting is much superior by its solidity, by the seriousness of its study, the firmness and the character of its people, to the series of official paintings with analogous subjects that are exhibited this year." [180] In fact, Buisson had only one negative comment about Lhermitte's work, that it was filled with too much scientific equipment. "The arrangement is not at all decorative. The foreground is clumsily encumbered with chemical apparatus" [181]

Georges Lafenestre's negative review was more explicit, although written with a certain amount of humor. He makes it clear that he believed allegories were unsuitable for representing science.

FIGURE 150 - ALBERT BESNARD LA VERITE ENTRAINANT LES SCIENCES A SA SUITE REPAND SA LUMIERE SUR LES HOMMES

> Whether one looks at it on high, in its architechtural frame or one looks at it from below, in the mirrors which reflect it, on has difficult understanding it. Half the canvas is blue. In this blue one can see globes, planets and stars. It is the entire world system. The other is yellow. In this yellow one can see, although with some difficulty, a nude woman in the foreground. She is even more yellow and is surrounded by light. She is running at a gallop. Behind her, are other women who are running, again not very clear with strange appearances and of exotic types. This appears to be TRUTH, CARRYING THE SCIENCES BEHIND HER, WHO POURS LIGHT ONTO MANKIND. Up to now, we believed that it was Science that discovered Truth, since that was their sole objective, and not Truth that discovered Science. But, in making allegories, it is not necessary to be too exact. Most of them rest on the play of words. Go then Truth carrying Science and pouring her light. [182]

The Hotel de Ville's decorations' committee itself was not very pleased with Besnard's allegory when they finally saw it. Not only were his colors shocking to them, but most didn't understand what the painting was about. According to Daniel Imbert, "La commission de decoration exprime, dans sa majorite, son hostilite au projet. Le sujet reste incomprehensible au plus grand nombre malgre le resume fourni par l'artiste." [183]

Perhaps the most critical review was written by Paul Leroi for L'ART. "Monsieur Albert Besnard, who certainly does not lack knowledge, has thought of trampling it the most possible under the pretext of originality. He has only finished a series of ever-

increasing insanities of which its supreme expression is seen in SKETCH OF THE CEILING DESTINED FOR THE HALL OF SCIENCES AT THE HOTEL DE VILLE: TRUTH CARRYING THE SCIENCES BEHIND HER, POURS OUT HER LIGHT ON MANKIND. I heard one lady make this comment to her friend: "Look at it! A woman in a jar of cornichons!" [184]

Leonce Benedite, in LA NOUVELLE REVUE, was a bit kinder to Besnard. He wrote that Besnard's work was so different that even his allegory gavethe impression of something original. "Monsieur Besnard is a decorator who does not fear being bold and who at least appears somewhat new. He has drawn the sketch of the ceiling which has been commissioned for the Hall of Science at the Hotel de Ville. The subject Mr. Besnard adopted is: LA VERITE, ENTRAINANT LES SCIENCES A SA SUITE, REPAND SA LUMIERE SUR LES HOMMES. This vast subject permits every fantasy to be deployed and Mr. Besnard has not refused the invitation. By his impressions of strange lighting and supernatural glimmerings, he has tried to give an original excitement to the grandiose goings and comings of worlds across the cosmic spaces, just as they were in the days of chaos." [185]

Perhaps Lafenestre was trying to save Besnard from ridicule when he suggested that the artist had simply made the error of rushing to exhibit a

preliminary oil sketch rather than waiting to show its final version. "Etait-il toutefois bien necessaire de mettre le public dans la confidence d'une preparation si insuffisante qu'elle lui prete à rire plus qu'à admirer et sur laquelle, d'ailleurs, il ne peut porter de jugement definitif?" [186]

Since such representations of science were no longer deemed suitable and Besnard exhibited the sketch in advance, why was he permitted to complete the project? Besnard was too well-known an artist to be replaced. All they required him to do was to make a few changes in the coloring. "However, in spite of this litany of unfavorable reviews, Besard was still allowed to complete his decoration almost exactly like his sketch. Perhaps his position as a known artist impressed his fiercest critics (one saw the same thing at the Hotel de Ville, when Puvis de Chavannes was able to impose on a reticent committee his ideas for a ceiling treated like a canvas.)" [187]

Although it is apparent that Lhermitte's "science" was quite different from Puvis' or Besnard's allegories, it is not known whether he thought about their paintings as he planned his own. When A. Hustin, a contemporary critic, asked him to explain his goals as an artist

Lhermitte responded, "Je me demande si, en verité, il est bien profitable aux artistes de formuler de la sorte le sens de leurs recherches et de se faire meme exceptionellement professeurs d'esthetiques....Je continuerai donc a m'adresser au public a l'aide de mon crayon et de mon pinceau." [188] Lhermitte had depicted the French countryside by painting the daily life of its ordinary and anonymous people. He represented science at the Sorbonne, however, by portraying identifiable individual scientists in their laboratories or lecture halls. The connection between Lhermitte's paintings of scientists and the other artists portraits of medical men was made at the time. Leonce Benedite asserted that Lhermitte's decorations for the Sorbonne and the medical paintings of the late 1880s constituted a single and unified group. "Apres Gervex, Lhermitte peignait 'Sainte-Claire Deville' ou 'Claude Bernard,' Brouillet, 'Charcot a la Salpetriere,' Edelfelt, 'Pasteur dans son Laboratoire..." [189] Even as limited as Benedite's group is, he gets the time-sequence backward. Edelfelt was first, not last. "Apres Edelfelt...."

It is interesting to note that there is a painting which brings within it the themes of the Sorbonne, Puvis' allegory, Pasteur and the young

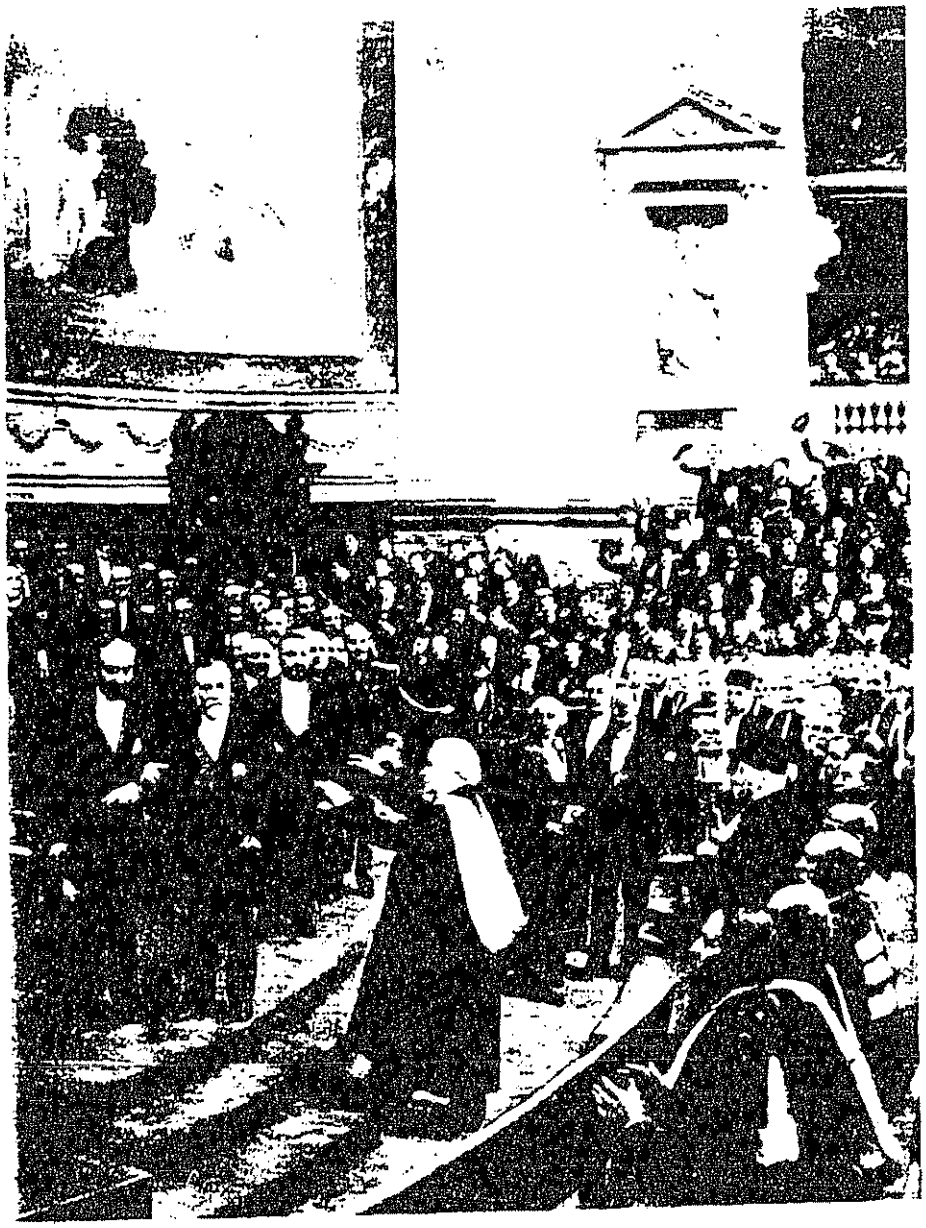


FIGURE 151 - LUCIEN LAURENT-GSELL PASTEUR'S JUBILEE AT THE SORBONNE

artists who had painted him, Lucien Laurent-Gsell's painting of the JUBILEE OF PASTEUR which was exhibited at the Salon of 1893 (Champs-Elysees). The painting was later moved to the Sorbonne where, as Maurice Caullery, professor at the Science Faculty noted, it was placed near the Edelfelt portrait of Pasteur and Lhermitte's Claude Bernard. "Son Conseil y siege, au Secretariat, dans une salle qu'ornent les portraits de Pasteur et de Claude Bernard et ou une grande toile fixe le souvenir du jubile de Pasteur, celebre dans le Grand amphitheatre de la Sorbonne, le 27 decembre 1892." [190] Part of Puvis's allegory to Science is visible in the upper left of Laurent-Gsell's canvas. In 1896, after Pasteur's death, Edouard Fournier exhibited his own homage to Pasteur, LA SCIENCE ET L'HUMANITE. [Figure 152]. This painting, which contains allegorical representation of Science (with wings) supporting Humanity, shows Pasteur noting the observations he has taken through his microscope. Science (Dr. Grancher) gives the rabies vaccine to his young patient (Humanity?) in the background.

Puvis had chosen to depict science among ancient youths, goddesses and myths, Lhermitte chose to concretize it in the scientific milieu of experiments and laboratories. In addition to honoring the

FIGURE 152 - L. E. FOURNIER LA SCIENCE AU SERVICE DE L'HUMANITE

ascendency of laboratory experiment over abstract notions of "science," Lhermitte's paintings also are reminders that the Sorbonne was to remain the center of scientific studies, even for medical school students. The regulations of July, 1893 codified Liard's proposal for more science for medical students. "Desormais nul ne commencera les etudes medicales sans un stage scientifique; mais ce stage ce fera en son lieu naturel, a la faculte des sciences, et non plus a la faculte de medecine." [191]

According to George Weisz, the reform was not welcomed by professors at the science faculty. "Because the science faculties did not receive enough new teaching posts, their professors grumbled about the amount of time they had to devote to elementary instruction." [146d]

The doctors who became the subjects of the new medical portraits discussed in this study have been described by several contemporary historians as "heroes." For example, Linda Nochlin refers to Claude Bernard, as represented by Lhermitte, to Dr. Pean, as painted by Gervex and to Samuel Gross and D. Hayes Agnew as shown by Thomas Eakins, as "scientists and doctors, nineteenth-century heroes in the service of humanity, [who] are, like artists and poets, portrayed in their working milieu, in the midst of their feats of discovery or missions of mercy." [147] In addition to these real-life doctors, Nochlin points to several fictional medical practitioners who she also calls heroes. Zola's Dr. Pascal "becomes the archetype of the selfless man of science, later apotheosized in Sinclair Lewis's ARROWSMITH and Paul de Kruif's biographical MICROBE HUNTERS, where in heroicized brief accounts of the actual achievements of real scientists, life seems to be imitating Realist art, to say nothing

of the same phenomenon in films like DR. ERLICH'S MAGIC BULLET or MADAME CURIE, where the scientist-hero, depicted with cirucmstantial accuracy, wins through in the end against overwhelming odds." [148]

Elizabeth Johns subtitles her study of Thomas Eakins, "The Heroism of Modern Life," and offers some explanation of why the term "hero" might legitimately be applied to the late nineteenth century surgeon. "Their achievements," argued Johns," demonstrated to optimistic nineteenth-century successors [of the Enlightenment] that heroic action came from traits of character that most men, with the encouragement of the new democratic times, had the potential to develop: the exercise of reason, firm standards of morality, and admirable self-discipline....Leaders...urged that men cultivate heroism in every role--that of the physician, the writer, the pianist, the banker, the factory owner, even the athlete. Their creed had several tenets. These modern heroes would be 'scientific,' undertaking their work on the basis of principles developed through direct observation and experimentation; they would be 'egalitarian,' investigating without prejudice all phenomena, activities, and people; they would be 'progressive,' acutely sensitive to change, and demonstrating their awareness of it by knowing the

history of their pursuit. And finally, they would be doers." [149]

Working at his usual routine, the doctor did not need to be a flamboyant surgeon in order to qualify as heroic. In the 1870s many surgeons still staged their operations as dramatically as possible. These "surgeons took turns at performing three or four spectacular operations, each surgeon introducing the next as the 'hero' of the upcoming demonstration....But Dr. Gross was not dramatic, and he would not permit such an atmosphere in his clinic." [150] Johns a bit further on wrote that, "the surgery that defined Gross as a modern surgeon was not the heroic amputation or the bladder-stone removal that had been practiced by earlier surgeons for centuries, but a quiet surgical procedure that in its capacity to improve the life of a patient illustrated incisively the benefits of the evolution of surgery." [151]

Nochlin and Johns thus define the hero/doctor as scientist and surgeon. The competing elites of the French medical profession agreed that the doctor hero was a champion of scientific medicine, but it just as well might be as a laboratory researcher, a skillful practioner in the operating room, or a member of the medical faculty. The hero's mastery of the new

science enabled him to invent vaccines or sera that would eliminate diseases, to construct machines which emitted invisible rays that cured fatal illnesses and to enabled his patients to survive the most dangerous and previously unattempted operations.

According to an historian who has written about the representation of heroes in art, "heroism is not necessarily an unchanging ideal, but rather that it is shaped and reshaped by society in accordance with other principles and purposes." [152] If a hero must be an exceptional character possessing special qualities that make him different, the nineteenth century hero was a product of a democratic environment which held the promise of making heroes out of anyone. Johns's explanation shows how the hero reconcile two seemingly opposite concepts. The new portraits of doctors, about which art critics commented so often that they had been painted in the dimensions previously reserved for the heroes of history paintings, were meant to depict them as modern heroes.

Science and progress had been joined together under various French governments during the nineteenth century, [153] but after 1876, it became particularly associated with republican values. Republicans and scientists, for example, shared a (professed) belief in

the unfettered search for truth. This belief became integral component of the ideology of the anti-clerical campaign, which republicans strongly contrasted with the restrictions on intellectual freedom they claimed were imposed by clerical authorities. During the mid-1880s, Stanislas Meunier's noted that "Les pretres d'Egypte et le clerge d'aujourd'hui paraissent avoir senti également quelle force doit leur procurer l'inferiorité intellectuelle soigneusement maintenue de leurs adversaires....L'ésprit moderne est exactement à l'antipode de ce point de vue: au lieu du monopole de savoir reserve a quelques-uns, il favorise de plus en plus le libre acces de chacun à la recherche et à l'étude des verités. Des lors, on ne saurait trop attacher d'importance au controle librement exerce par tous, meme par le plus infime des etudiants, à l'egard des assertions scientifique meme produites par les maitres les plus illustres."[154]

Success in science, furthermore, did not depend on one's social origins. The secrets of science could, at least in theory, be uncovered by even those from ordinary families. Science and medicine supposedly provided a career open to talented individuals from all levels of society. The Third Republic pointed to many illustrious medical men who

illustrated these ideals (even if their rise had taken place for the most part under previous governments). Dr. Péan was only one of many medical men whose rise to prominence was meant to serve as an example. Pasteur's humble origin - his father was a tanner - was celebrated on July 14, 1883 by a plaque placed on the house of his birth by the municipal council at Dole. In Weisz's view, increased enrollment at the Medical Faculty could help the state show that it was sensitive to the needs of its supporters. "For the republican politicians in power, facilitating access to higher and secondary education was a means of satisfying the demands for increased equality and social mobility coming from their lower and middle-class electoral clienteles." [154b] Increased enrollment at the medical faculty could also be claimed by the academic elite as a measure of its own success. The elite of the medical profession thus found itself in harmony with the program of the republican government. Each sought to portray itself as promoting science.

On the other hand, increased enrollment at medical faculties would, inevitably, lead to even further overcrowding of the profession. This prospect certainly did not suit ordinary doctors. Doctors who were not part of the scientific elite also considered

their work heroic, and they were not simply going to allow only the elite doctors to be considered as heroes. Nochlin noted that heroism included "the service of humanity," and uses by way of example the painting that was "perhaps the best known of these medical panegyrics...Luke Fildes's moving, and certainly extremely accurate THE DOCTOR...." [155]

During the early 1880s, the subject of doctors's heroism arose from time to time in the pages of the CONCOURS MEDICAL. Cezilly's publication, equated heroism with courage and sacrifice. For example, its "Bulletin De La Semaine" of February 7, 1880 reported the death of another young medical student, "a victim of his own courage. We must add the name of Reverdy to that of Herbelin whom we noted the other day, as the seventh this year. Reverdy died at the Sick Children's Hospital. It is again the croup which has taken our young colleague from us." [156] Athough the article appeared in a professional journal, the author hoped that Reverdy's story would become widely known. "Il est bon que le grand public sache le devouement obscur, le courage tranquille de ces hommes, qui pour avoir le droit de vivre en soignant leurs semblables, passent leurs annees de jeunesse dans des hopitaux ou se trouvent reunies toute les chances

possibles de contagion et vont puiser la science au lit du malade qui leur transmettra, peut-etre, le germe de la mort." [157] In the same issue of UNION MEDICALE, Cezilly compared doctors who died from diseases incurred as a result of their practice to heroic soldiers who fell on the battlefield. He noted, however, that the government seemed cold to his ideas. Cezilly wrote, "Shouldn't widows and children of doctors who died as a result of their practice be entitled to pensions and lycee scholarships from the state just the same as are soldiers who died on the field of battle? Here is the report of the Deputy, Monsieur Talandier:

'If so, then in industry and science and all professions where there is danger of sudden death should be included. It is a very large question....Doctors choose their profession. It is up to them.'

No. In a civilized society, the state has moral obligations, not simply formal obligations." [158]

Six months later, the CONCOURS MEDICAL received a reply from Interior Minister Constans, rejecting Cezilly's comparison of doctors to soldiers and that pensions should be paid to their widows and orphans. Cezilly accepted this reply, but turned it to his own

advantage. He argued that doctors, no matter what the Interior Minister said, were heroes who braved danger every day. Therefore, since the government would not recognize this simple truth and grant pensions to their widows and children, it was even more important that doctors join his Union movement. He told his readers that "we must protect ourselves. As the minister says, 'medicine, like other professions, has its dangers." [159] If the scientist/doctor could be the hero of the new medical portrait, then the ordinary family doctor, unnamed and dedicated could be the hero of genre paintings.

At the same time, the Pastorians found their own hero, Louis Thuillier, whose life and death in Egypt in 1883 reminded the world that the work of their laboratory was not without danger. Pasteur referred several times to "la mort heroique de Thuillier." [160] The medical community as well honored Thuiller's sacrifice, indirectly reminding readers that its members routinely faced similar dangers. The GAZETTE MEDICALE DE PARIS noted that "Nous sommes a l'aise pour dire un dernier adieu au courageux Thuillier, d'autant plus a l'aise que Thuiller n'etait pas medecin, N'est-il pas digne d'admiration, en effet, ce jeune savant, ce normalien plein d'avenir, qui de lui-meme est alle

au-devant de la mort?

Il doit etre considere comme un vrai martyr de la science, plutot que comme victime d'une maladie, qui sans doute ne serait pas venue le chercher dans le laboratoire de la rue d'Ulm. Il est devoue au service de l'humanite en demandant a faire partie d'une mission qui allait etudier sur place les causes, les conditions de developpement et les remedes la cholera.

Honneur a cette jeune victime de la libre recherche." [161]

A plaque in his honor which read: "Louis Thuillier Mort pour la science Alexandrie 1883" - was installed at the Ecole Normale and his burial was paid for by the national government. The city of Paris named a street in the fifth arrondissement after Thuillier.

The movement to portray themselves as heroes of science may actually have worked to the disadvantage of elite doctors. Paul Brouardel, Dean of the Faculty of Medicine at the University of Paris, but a supporter of ordinary doctors of the Union movement, [162] attacked the campaign by the profession's elite to equate modern medicine and science. He denied that their position in the forefront of scientific medicine entitled them to control medicine. Brouardel argued

that this emphasis on science had actually separated the doctor from his patient. In his view, doctors used to be the "medicus familiaris. But today, it has changed. Doctors know a great deal more about their specialty but they do not know their patients." [163]

Brouardel's second argument was that the increasing science in medicine has contributed to even further overcrowding of the profession. Since science has been promoted as the key to progress and the nation's future, it is only natural that young French men and women, desiring to be "scientists" have been increasinly attracted to careers in medicine. "D'ou vient, messieurs, cette augmentation considerable du nombre des medecins et des etudiants en medecine aussi bien en France qu'a l'etranger?....Il me semble plus probable que cet engouement pour l'etude des science medicale tient aux progres si rapides de la medecine et de la chirugie dans la seconde moitie de ce siecle. Les decouvertes si importantes de la bacteriologie, la mise en pratique courante des operations chirurgicales, grace a l'antisepsie, repandues dans le public par l'intermediare de la presse quotidienne, ont fait voir aux parents un debouche moins aleatoire que le commerce ou l'industrie pour les jeunes gens ayant fait des etudes secondaires suffisantes." [164]

Thirdly, Brouardel contended that the spread of the belief that medicine has become scientific had had the result that the general public had come to expect their doctors to cure them and that operations would be completed successfully every time. When doctors failed, argued Brouardel, patients were very likely to sue their doctor, the ordinary doctor as well as his scientist colleague. Brouardel cited a case in which the Medical Faculty of the University of E. testified against a doctor because he had not followed the latest scientific practices. Although the case was German, it had been reported in the ANNALES DE HYGIENE of 1887 (vol. XVII) and therefore Brouardel felt it appropriate to include in his book, since it seemed to portend events that might soon occur in France. [165]

Brouardel also raised the issue that patients might believe that doctor/scientists were more interested in them as medical experiments than as people to be treated. "Dans certaines journaux medicaux, on lit chaque jour que tel medecin a commis tous les mefaits imaginables....Le corps medicale se heurte a un semtiment de suspicion tres net, tres franchement avoue." [166] Brouardel wrote about one doctor who, "avant les deouvertes de Roux en France et de Behring en Allemagne dans le domaine de la serum-

therapie, un medecin de Paris eut l'idee de saigner des cevres et d'injecter le serum a des tuberculeux." [166b] His patients died immediately, although it could not be proved that the cause of death was the injections. Since that case, however, according to Brouardel, the courts have tended to side with the public and have handed down very severe penalties on unfortunate medical men.

In the first years of the new century, Brouardel summed up his views. "Certes, il est necessaire qu'il y ait des specialistes, c'est une consequence ineluctable des progres scientifiques. La medecine devint une science tellement vaste, qu'il est non seulement difficile, mais impossible d'en connaitre d'une maniere suffisante toutes les branches....Cependant si j'admets la necessite des specialistes, je pense qu'il est non moins necessaire que l'execution du traitement qu'ils prescribent soit surveillie par le medecin de famille." [166c]

How successful were the elites of the medical profession and the pastorians in advancing their own interests? As noted earlier, the pastorians immediate success in the creation of the Pasteur Institute was in no small measure due to the favorable image as scientists serving humanity with Pasteur and those

around him were represented. [167] Despite this victory, however, the pastorians remained a group apart and in Anne Marie Moulin's view, the Pasteur Hospital never became a very important institution within the medical profession. "...Although some prestigious professors attended as consultants, the hospital remained insulated from the medical school and the residents were never recruited via the concours of the Assistance publique. It mainly housed patients sent by the colonial physicians....By the 1930s the hospital had become somewhat an 'hopital de quartier' and was hardly a commonground between researchers' interests and clinicians' goals." [168] It is perhaps not without significance that L. E. Fournier's apotheosis of Pasteur, LA SCIENCE AU SERVICE DE L'HUMANITE, which clearly expressed the goal of the Pasteur Hospital to bring together laboratory research, science and medical practice, decorated the Ecole Normale Superieure rather than the Medical Faculty.

In the same period, the two opposing medical elites sought to defend their positions, in part, by attacking each other's territory. Hospital doctors not only demanded faculty appointments, they threatened to establish an official educational track outside the faculties. According to George Weisz, "Between 1890

and 1893, a few men launched a noisy campaign of criticsm against official medical studies....As in the 1870s, the Assistance Publique, which administered the Parisian hospitals, began making threatening noises about its intention to establish a teaching hospital independent of the faculties." [169]

On the other hand, the Faculty was successful in preserving the agregation as a barrier to admission to its ranks by hospital doctors. They tried on several different occasions to open the door which had kept them from postions at the Faculty. "The [Medical] Congress of 1907," Weisz points out, "as well as two subsequent meetings in 1908 and 1910, passed resolutions calling for the abolition of the agregation, which protected the teaching monopoly of the 'mandarins.'" [170] The attack on this barrier came, not unexpectedly, in part from the other medical elites. "The campaign against the agregation." Weisz continued, "won the qualified support of those in the non-academic research sector, notably in the hospitals (Huchard) and in the Institut Pasteur, whose director, Emile Roux, published a widely publicized indictment of the agregation [171], until the outbreak of the First World War at least, the Faculty was able to blunt any changes in the agregation. In Weisz's terminology,

"the reform of the agregation evolved in a rather circuitous fashion.

Thus the continued separation between the Faculty and the Hospital of the successful campaign of two competing elites. Theodore Zeldin points out that "it was only in the late 1950s that universities and hospitals were at last united." [172]. To a large degree, this continued separation has been seen as a failure in the reform of medical education since it was in part to blame for the prevention, in Weisz's view, of "the emergence of extensive postgraduate specialization in the experimental sciences. This failure which, I would argue, was a major factor in French medicine's apparent lack of dynamism in the twentieth century, was also the result of the academic elite's attachment to an outdated system of concours that symbolized its authority and protected its exclusiveness." [173] But each elite, if not successful in eliminating the power of the other, was able to maintain its own status.

Hospital doctors and the medical faculty sought to transmit to the public their belief that their group led profession in creating and mastering the new scientific medicine.

"The medical community, too," assert Ann La Berge and

Mordechai Feingold, "needed stable channels through which to transmit and difuse medical ideas. Historians differ in their evaluations of the manner in which new techniques such as microscopy or a such as Pasteurian germ theory were disseminated." [174] These new portraits, which were exhibited at the annual Salon before being sent to various institutions, were one such technique of illustrating to the public the role the subject of the painting played in the new medicine. It confirmed his expertise or his claim priority. The paintings illustrated medical progress based on the new science centered at the hospital.

The academic elite no longer were painted conducting anatomy lessons because the new science of medicine was based on bacteriology rather than on anatomy. Complaints by representatives of the ordinary practitioners that the public would misunderstand the paintings suggest that these canvases were indeed an effective tool in the struggle between the academic elites.

FOOTNOTES CHAPTER FIVE: PASTEUR AND THE SALON

1. Lambert, Paul. "Le Salon de 1887" PARU DANS LE JOURNAL LA NATION, p. 16, a reprint of an article which appeared originally on April 29, 1887, but cited the figures for 1886

2. Lambert, Paul, "Le Salon de 1887," ibid., pp. 60-61

3. Sharp, William. "The Paris Salon," THE ART JOURNAL, London, 1884. p. 223

4. EXPLICATIONS DES OEUVRAGES DE PEINTURE, etc. 1886

5. de Lostalot, Alfred. "Le Salon de 1886: La Peinture," GAZETTE DES BEAUX-ARTS, vol. 33, #6, June 1, 1886, p. 453

6. Leroi, Paul. "Le Salon de 1886," L'ART, vol. 40, p. 215

7. Ponsonailhe, Charles. "Salon de 1886," L'ARTISTE, 1886, p. 403

8. Ponsonailhe, Charles, "Salon de 1886," ibid., p. 403

9. Zeldin, Theodore. FRANCE, VOL. 1 AMBITION, LOVE AND POLITICS, Clarendon Press, Oxford, 1973. p. 390

10. Geison, Gerald, "Pasteur: A Sketch in Bold Strokes," WORLD'S DEBT TO PASTEUR, Wistar Symposium Series, Volume 3, Hilary Koprowski and Stanley A. Plotkin, editors. Alan R. Liss, Inc., New York, 1985. pp. 13-14

11. George, Andre. PASTEUR, Editions Albin Michel, Paris, 1958. "Jusqu'a alors il a avance sancs un jour de revers. Il s'est agi d'abord de cristaux, puis de ferments, ensuite d'animaux et qu'il querissait. Mais cette fois la science lui propose un terrible rendez-vous: il s'agit de l'homme, de la personne humaine, de l'etre sacre. Et rien ne nous montre mieux le vrai Pasteur." p. 132

12. Lafenestre, George. "Le Salon de 1886," REVUE DES DEUX MONDES, vol. 75, June 1, 1886, p. 597

13. SALON DE 1886, Librairie d'Art, L. Baschet. Paris, 1886. p. 77

14. de Lostalot, Alfred. "Le Salon de 1886: La Peinture," op. cit., p. 459

15. De Boutarel, Paul. "Salon de 1886," LA NOUVELLE REVUE, #40, June 1, 1886, p. 613

16. For example in his speeches at the Academy of Sciences in 1874 and 1878

17. In 1892, Pasteur wrote to the Countess Greffulhe thanking her for her words, "si flatteuses, 'La medecine avant Pasteur. La medecine apres Pasteur." CORRESPONDANCE DE LOUIS PASTEUR, 1840-1895 REUNIE ET ANNOTEE PAR PASTEUR VALLERY-RADOT, Flammarion, Paris, 1951 [hereafter, CORR.], vol. IV, p. 327, Feb. 20, 1892. Stephen Paget entitled his history of medicien, PASTEUR AND AFTER PASTEUR (Adam and Charles Blank, London, 1914). Andre George also notes that "Richet a pu declarer qu'il divisait l'hisotire de la medecine en deux: avant, apres Pasteur." PASTEUR, op. cit., p. 152

18. EXPLICATIONS DES OEUVRAGES, 1886

19. CORR., vol. III, p. 418

20. Geison, Gerald. "A Sketch In Bold Strokes," op. cit., p. 11

21. CORR. vol. IV, p. 209, Aug. 9, 1887

22. CORR. vol. IV, p. 238, March 6, 1888

23. See Maya Starr's "Pasteur As A Painter," in WORLD'S DEBT TO PASTEUR, op. cit., pp. 29-39. Starr quotes Durand-Greville, a contemporary art critic who wrote in 1888 that 'No one will regret that Pasteur pursued a scientific career, but, if he had wanted to, he could have become a good painter, maybe one of the greatest.'" p. 36. See also Maurice Vallery-Radot's more recent study, PASTEUR DESSINS ET PASTELS, Editions Hervas, Paris, 1987.

24. See Geison, Gerald, "A Sketch in Bold Strokes," op. cit., pp. 11-12. He cites the statements of both Loir and Roux.

25. CORR, II, June 19, 1876. Jean-Baptiste was Pasteur's son and Jeanne, his daughter-in-law. Her portrait is, as is that of Marie-Louise, currently at the Pasteur Institute in Paris. Marie-Louise's

portrait session that Pasteur refers to was slightly delayed. That day, Pasteur had to take his daughter to the doctor to be vaccinated and, as he wrote to Henner, "If the cab and everything else is prompt, we'll be at Place Pigalle [Henner's studio, RW] about 1:40."

26. CORR., vol. II, p. 639, June 21, 1876

27. CORR., vol. III, p. 20, April 13, 1877

28. CORR., vol. III., p. 118, Nov. 12, 1879

29. CORR., vol. III, p. 135

30. GRANDS PEINTRES FRANCAIS ET ETRANGERS, H. Launette et Cie., Paris, 1886, pp. 210-211

31. CORR., vol. III, p. 135

32. CORR., vol. II, p. 643, August 10, 1876

33. CORR., vol. III, o. 24, June 2, 1877

34. CORR., vol. II, p. 644, August 10, 1876

35. CORR., vol. III, p. 58, July 11, 1878

36. CORR., vol. III, p. 357, May 21, 1883

37. CORR., vol. IV, p. 300, September 7, 1889

38. CORR., vol. IV, p. 290, March 24, 1890

39.CORR., vol. II, p. 650, November 3, 1876

40. CORR., vol. III, pp. 131-132

41. CORR., vol. III, pp. 135-136, May 21, 1880

42. CORR., vol. III, p. 435, August 21, 1884. It was at this conference that Pasteur gave the speech in which he said that although science may have no nationality, scientists do. "Dans tout grand savant," he added, "vous trouverez toujours un grand patriote."

43. CORR., vol. IV, p. 323, Nov. 17, 1887

44. CORR., vol. IV, p. 323, Nov. 7, 1887

45. CORR., vol III, p. 413, March 22, 1884

46. CORR., vol. III, May 21, 1883

47. Vallery-Radot, Maurice. PASTEUR, UN GENIE AU SERVICE DE L'HOMME, Favre, Lausanne, 1985, p. 111

47b. See Alfred Le Petit's caricature of Jules Ferry awarding a medal to Robert Koch in LE GRELOT, August 3, 1884.

48. CORR., vol. III, p. 431, July 7, 1884. The entire story of the expedition to Alexandria and Pasteur's conflict with the French medical establishment over it has yet to be told fully.

49. CORR., vol. III, p. 422, June 2, 1884

50. CORR., vol. III, p. 443

51. Boutarel, P. "Salon de 1886," LA NOUVELLE REVUE, #40, June 1, 1886, p. 613

52. Comte, Jules. "La Peinture," L'ILLUSTRATION, May 1, 1886, No. 2253, p. 286

53. Noulens, J. ANNUAIRE DU SALON. ARTISTES FRANCAIS ET ETRANGERS AU SALON DE 1886, E. Dentu, Paris, 1887, pp. 43-44

54. Olmer, Georges. SALON DE 1886, Librairie d'Art, L. Baschet, Paris, 1886, p. 77

55. de Lostalot, Alfred. "Le Salon de 1886: La Peinture," GAZETTE DES BEAUX-ARTS, vol. 33, #6, June 1, 1886, p. 459

56. Claretie, Jules, "Leon Bonnat," CONTEMPORARY PAINTERS AND SCULPTORS, Paris, 1883, pp. 143-144

57. Claretie, J. ibid., p. 146

58. Claretie, J. ibid., p. 147

59. Claretie, J. ibid., p. 151

60. Camille had also been the name of Pasteur's second daughter who died in 1865 at the age of two.

61. Noulens, J. ANNUAIRE DU SALON, op. cit., p. 44

62. Noulens, J. ANNUAIRE DU SALON, ibid., p. 43

63. Vallery-Radot, Maurice. PASTEUR, UN GENIE AU SERVICE DE L'HOMME, op. cit., p. 112

64. CORR., vol. IV, p. 41, September 25, 1885

65. CORR., vol. IV, p. 62, March 11, 1886

66. Ponsonailhe, Charles. "Salon de 1886: La Peinture," L'ARTISTE, June, 1886, pp. 440-441

67. Beale, Sophia. THE ART JOURNAL, vol. 49, 1886, p. 224

68. Ponsonailhe, Charles, L'ARTISTE, op. cit., p. 26-27

69. Leroi, Paul. "Le Salon de 1886," L'ART, vol. 40, 1886, p. 232

70. Leroi, Paul, L'ART, ibid., p. 232

71. de Lostalot, Alfred. GAZETTE DES BEAUX-ARTS, op. cit., pp. 459-460

72. Ponsonailhe, Charles. L'ARTISTE, 1886, op. cit. pp. 421-422

73. Ponsailhe, Charles, ibid., p. 403. The others were two by Roll, LE PORTRAIT DU PAYSAGISTE DAMOYE and L'ETUDE DE FEMME and one by Besnard, LE PORTRAIT DE MME. ROGER JOURDAIN.

74. Moreau-Vauthier. LES CHEFS-D'OEUVRE DES GRANDS MAITRES 1800-1900, Nouvelle Serie, Hachette et Cie., Paris, n.d. after 1905, non-paginated.

75. Benedite, Leonce. LE PEINTURE AU XIXieme SIECLE, Flammarion, Paris, 1909, p. 353

76. Thomas Eakins, it should be noted, had studied with both Gerome and Bonnat. Bonnat had many Scandinavian students, although Edelfelt was not one of them. See Henri Usselmann, "Leon Bonnat, d'apres les temoignages de ses eleves nordiques," KONSTHISTORISK TIDSKRIFT, Vol. 55, No. 2, 1986, pp. 67-76. Usselmann lists thirty-six Scandinavian painters who studied with Bonnat between 1865 and 1892, i.e., seven Finnish, four Swedish, fourteen Danish and eleven Norwegian.

77. A complete catalogue raisonne makes up Part III of Bertel Hintze's biography, ALBERT EDELFELT, Soderstrom & Co., Forlagsaktiebolag, Helsingfors, 1953

78, Bernard-Folliot, Denise. "Albert Edelfelt," GAZETTE DES BEAUX-ARTS, Series 6, vol. 102, December, 1983, p. 183

79. Thiebault-Sisson. "Salon de 1895," Librairie d'Art, L. Baschet, Paris, 1895, p. 73

80. Bernard-Folliot, Denise. "Albert Edelfelt," op. cit., p. 182

81. Bernard-Folliot, Denise. ibid., p. 184

82. EDELFELT'S LETTERS [henceforward, LETTERS]. These letters exist only in Finnish and Swedish; I wish to thank Mrs. Chauncey Frederickson Leake for translating them for me.

83. LETTERS, April 23, 1885

84. LETTERS, May 27, 1885

85. LETTERS, June 5, 1885

86. LETTERS, June 12, 1885

87. Geison, Gerald. "Pasteur, Roux and Rabies: Scientific versus Clinical Mentalities, JOURNAL OF THE HISTORY OF MEDICINE AND ALLIED SCIENCES, vol. 45, July, 1990. pp. 342-348

88. Dubos, Rene. PASTEUR. FREELANCE OF SCIENCE, p. 334

89. Geison, Gerald. "Pasteur, Roux and Rabies," op. cit., p. 354

90. LETTERS, June 28, 1885

91. CORR., vol. IV, p. 24, June 26, 1885

92. LETTERS, November 30, 1885

93. LETTERS, April 3, 1886

94. LETTERS, April 6, 1886

95. LETTERS, May 2, 1886

96. LETTERS, June 6, 1886

97. CORR., vol. IV, p. 233, December 30, 1887

98. de Boutarel. P. NOUVELLE REVUE, June 1, 1886, op. cit., p. 613

99. Lafenestre, George. REVUE DES DEUX MONDES, v. 75, June 1, 1886, op. cit., p. 597-598

100. Lafenestre, George. ibid., p. 597

101. Lafenstre, George. ibid., p. 598

102. Wolff, Albert. FIGARO SALON, 1886, p. 22

103. Stranahan, C.H. A HISTORY OF FRENCH PAINTING FROM ITS EARLIEST TO ITS LATEST PRACTICE, Charles Scribners and Sons, N.Y., 1902, p. 401. This was a revision of his first edition, published in 1888

103b. This brief biographical note was part of Leroi's review of the next year's Salon, at which Laurent-Gsell exhibited another important painting, which I will discuss further on. Leroi, Paul, "Salon de 1887," L'ART, #42, 1887, p. 210

104. Leroi, Paul. :Le Salon de 1886," L'ART, #40, 1886, p. 251

105. Noulens, J. ANNUAIRE, 1886, op. cit., p. 141

106. Noulens, J. ANNUAIRE, ibid., p. 141

107. CORR., vol. III, p. 438, September 22, 1884

108. CORR., vol. III, 445, December 14, 1884

109. CORR., vol. IV, p. 14, March 28, 1885

109b. Quoted in Geison, Gerald, DICTIONARY OF SCIENTIFIC BIOGRAPHY, Volume X, Charles Couston Gillispie, Editor, Charles Scribners and Sons, 1974, p. 404

110. The actual amount of opposition has been challenged by Bruno Latour, THE PASTEURIZATION OF FRANCE, Translated by Alan Sheridan and John Law,

Harvard University Press, Cambridge, Mass. and London, England, 1988. This volume is a more complete study than his earlier , "Le theatre de la preuve," in Claire Salamon-Bayet, PASTEUR ET LA REVOLUTION PASTORIENNE, Paris, Payot, 1986.

111. CORR., vol. IV, p. 94, August 22, 1886

112. See, for example, an article the British PROVINCIAL MEDICAL JOURNAL, December 1, 1886, p. 563, which cited similar statistics to those Pasteur had reported to the Academy of Science on November 2. The number of American patients remained at eighteen.

In the above statistics, two points are to be noted:
(1) The small number of American patients. The Americans were among the first to take the method up, they were amongst the first to send over cases. Why have they not continued to do so? Have there been no dog bites to treat? Has hydrophobia decreases in the States?"

The articles second point was that there were no German patients either. For a discussion of the reaction of the American press to the anti-rabies vaccine, see Bert Hansen's, "La Reponse Americaine a la Victoire de Pasteur Contre La Rage," in Michel Morange, editeur, L'INSTITUT PASTEUR CONTRIBUTIONS A SON HISTOIRE, Editions La Decouverte, Paris, 1991, pp. 89-102

113. CORR., vol. III, p. 35, August 22, 1885

114. Morange, Michel, L'INSTITUT PASTEUR, op. cit., p. 239

115. Leroi, Paul. "Salon de 1887," L'ART, #42, 1887, p. 178. The painting was reproduced on p. 173

116. Leroi, P. L'ART, ibid., p. 209

117. Ponsonailhe, C. "Le Salon: Peinture III," L'ARTISTE, August, 1887, p. 113

118. Ponsonailhe, Charles. "Le Salon, Peinture," L'ARTISTE, June, 1887, 417

119. Leroi, Paul. "Salon de 1887," L'ART, #42, 1887, op. cit., p. 209-219

120. Lafenestre, George. "Le Salon de 1887," REVUE DES

DEUX MONDES, vol. 81, June 1, 1887, p. 634

121. Wolff, Albert. FIGARO SALON, Boussod, Valador et Cie., Paris, 1887, p. 40

122. Crespi, J.H. "Pasteur At Home," GENTLEMAN'S MAGAZINE, vol. 268, No. 1911, March, 1890, p. 257

123. Crespi, J.H. "Pasteur At Home," ibid., pp. 257 and 264

124. Crespi, ibid., pp. 264 and 275

125. Crespi, ibid., pp. 266-273

126. Crespi, ibid., p. 270

127. Quoted in Crespi, ibid., p. 271

128. CORR., vol. IV, p. 198, May 27, 1887

129. CORR. vol. IV, p. 248, July 17, 1888

130. L'ART FRANCAIS, #9, June 26, 1887

131. CORR., vol. IV, p. 221, October 18, 1887

132. CORR., vol. IV, p. 221, October 18, 1887

133. Quoted in CORR., p. 221

134. CORR., vol. IV, p. 132. Footnote by Pasteur Vallery-Radot

135. CORR., vol. IV, p. 258, September 4, 1888

129. CORR, IV, 248, July 17, 1888
130. L'ART FRANCAIS, #9, June 26, 1887

131. CORR., IV, 221, October 18, 1887.

132. CORR. Oct. 18, 1887

133. quoted in ibid, p. 221

134. CORR, IV, p. 132. Footnote by Pasteur Vallery-Radot
135. CORR., IV, 258, September 4, 1888

136. Durkheim, Emile. LA VIE UNIVERSITAIRE A PARIS,

Librairie Armand Colin, Paris, 1918, p. 17

137. Durkheim, Emile. ibid., p. 19

138. Durkheim, Emile, "Organisation Generale De L'Universite de Paris," in LA VIE UNIVERSITAIRE A PARIS, ibid., p. 20

139. Durkheim, Emile. ibid., pp. 20-21. The text has the word "premisses," which I believe to be an error. The correct word should be, in my view, "premices" and I have translated it as "first fruits." The practice of giving premices to the gods was not uncommon in antiquity, and this translation makes more sense than premisses.

140. Thiebault-Sisson. "Le Salon de Peinture," LA NOUVELLE REVUE, v. 46, May-June, 1887. p. 784

141. Javel, Firmin. "La Nouvelle Sorbonne," L'ART FRANCAIS, August 17, 1889, n.p.

142. Lafenestre, Georges. "Le Salon de 1887," REVUE DES DEUX MONDES, v. 81, June 1, 1887, p. 607

143. Liard, Louis. L'ENSEIGNEMENT SUPERIEUR EN FRANCE 1789-1893, vol. 2. Armand Colin, Paris. 1894. pp. 373-374

144. Thiebault-Sisson, LA NOUVELLE REVUE, 1887. p. 784

145. Lafenestre, "Salon de 1887," op. cit., p. 609

146. Lafenestre, ibid., p. 608

147. Lafenestre, ibid., p. 609

148. Lafenestre, G. "Salon de 1887," op. cit., p. 608

149. Houssaye, Henry. "Le Salon de 1883," REVUE DES DEUX MONDES, v. 57, June 1, 1883. p. 597

150. Houssaye, H. "Le Salon de 1884," REVUE DES DEUX MONDES, v. 63, June 1, 1884, p. 561

151. Norech, Paul. "Salon," L'UNION MEDICALE, vol. 49, No. 72, June 19, 1890. p. 872

152. Norech, Paul. "Le Salon," L'UNION MEDICALE, p. 891.

153. Norech, Paul., ibid, p. 890 Norech's name is spelled as both Norech and Noreck. Each volume of L'UNION MEDICAL contains several installments of the Salon review, and the spelling is internally consistent, although spelling varies from year to year.

153b. #1700 in the Salon Catalogue.

154. Thiebault-Sisson, SALON DE 1895, Librairie d'Art, Baschet, Paris, 1895, pp. 61-62

155. Lafenestre, Georges, "Le Salon de 1889, REVUE DES DEUX MONDES, v. 93, June 1, 1889, p. 646. The people are identified in the ALBUM GONNON. See also NEUROLOGY, October, 1982, p. 1145

156. Wolff, Albert, FIGARO SALON, 1889, p. 4

157. Jacquet, Valentine Claudius. "Salon de 1889, Un Art National," LA NOUVELLE REVUE, vol. 58, May-June, 1889. p. 365

158. Hamel, Maurice. GAZETTE DES BEAUX-ARTS, #6, June 1, 1889. p. 449

159. Gauthiez, Pierre. "Le Salon de 1889. La peinture decorative," L'ARTISTE, June, 1889. p. 457

160. Javel, Firmin. L'ART FRANCAIS, May 25, 1889. n.p.

161. Dr. Norech, Paul. "Salon," UNION MEDICALE, v. 47, 3rd Series, No. 66, May 28, 1889, p. 797

162. Norech, P. L'UNION MEDICAL, 1889, ibid., p. 797

163. Leroi, Paul. "Le Salon de 1889," L'ART, #46, 1889. p. 202

164. Schupbach, W. "A Select Iconography of Animal Experiment," p. 355 in Rupke, Nicolaas A. editor, VIVISECTION IN HISTORICAL PERSPECTIVE, Croom Helm, London, New York, Sydney, 1987

165 Schupbach, William. "A Select Iconography of Animal Experiment," ibid., p. 356

166. ALBUM GONNON, pp. 43-44

167. Lesch, John E. SCIENCE AND MEDICINE IN FRANCE THE EMERGENCE OF EXPERIMENTAL PHYSIOLOGY 1790-1855, Harvard Univ. Press, Cambridge and London, 1984. pp. 221-222

168. #1563 in the Catalogue. This painting, as well as the second exhibited by Mengin, PORTRAIT DE M. RENAN, are listed as belonging to Monsieur H. Raffalovich

169. De Saint-Victor, Paul. "Le Salon," L'ARTISTE, July, 1878, p. 21

170. #577 in the Catalogue (Champ-de-Mars), Le Mercier et Cie, Paris, 1890.

171. Hoschede, Ernest. BRELAN DE SALONS, Bernard Tignol, Paris (1890). p. 208. It is interesting to note that Hoschede's own portrait by Louis Picard was exhibited at the 1890 Salon. For a brief note on Hoschede's career, see Albert Boime, "Entrepreneurial Patronage in Nineteenth Century France," in Edward C. Carter, Robert Forster and Joseph N. Moody's ENTERPRISE AND ENTREPRENEURS IN NINETEENTH AND TWENTIETH CENTURY FRANCE, Johns Hopkins University Press, Baltimore and London, (1976), pp. 154-155. Hoschede had been the head of several department stores, owned restaurants and engaged in finance. He collected the work of the

younger artists and, "totally immersed in the art world, he culminated his career as a professional art critic....His last published article wa a sympathetic review of the young generation of female artists emerging in France at the end of the century." Boime, ibid. pp. 154-155

172. Lafenestre, G. "Les Salons De 1890," REVUE DES DEUX MONDES, vol. 99, June 15, 1890. p. 930

173. Lafenestre, G. "Les Salons De 1890," ibid. p. 930

174. Lafenestre, G. "Les Salons De 1890," ibid., p. 930

175. Norech, P. "Le Salon," L'UNION MEDICALE, vol. 49, p. 829

176. ALBUM GONNON, p.105

177. Pasteur, L. CORRESPONDANCE, III, pp. 364-366, July 26, 1883. When Sainte-Claire-Deville died, his widow sent a photograph of her late husband to Pasteur. Pasteur wrote back that it was one of the three best photographs he had ever seen. He named the other two as those of Regnault, 1810-1878 and Brongniart, 1801-1876. Pasteur asked Mme. Sainte-Claire-Deville who the photographer was. "J'aimerais laisser a ma famille quelque chose d'approchant le jour ou il faudra lui dire le dernier adieu." [CORRESPONDANCE, III, pp. 259-260. October 5, 1881] I have not found any evidence to identify the photograph to which Pasteur referred but it well may be the one by Nadar.

178. Mabilleau, Leopold. "Le Salon Du Champ-De-Mars," GAZETTE DES BEAUX-ARTS, 3rd Period, vol. 4, 1890, p. 11.

179. Leroi, Paul. L'ART, vol. 49, 1890, p. 40

180. Buisson, J. "Remarque d'Un Passant Sur Les Salons De Paris," L'ARTISTE, June, 1890. p. 414

181. Buisson, J. ibid., p. 414

182. Lafenestre, G. "Les Salons de 1890," Revue Des Deux Mondes, vol. 99, June 15, 1890, p. 908

183. Imbert, Daniel. "Les Decors de l'Hotel de Ville," in Burollet, Therese, LE TRIOMPHE DES MAIRIES GRANDS DECORS REPUBLICAINS A PARIS 1870-1914, Editions Paris

Musées. 1986. pp. 315-316

184. Leroi, Paul, L'ART, vol. 49, 1890, op. cit., p. 39

185. Benedite, L. "Le Salon de 1890," LA NOUVELLE REVUE, vol. 65, June 1, 1890, p. 397

186. Lafenestre, G. "Les Salons de 1890," op. cit., p. 908

187. Imbert, Daniel. "Les Decors de L'Hotel de Ville," op. cit., p. 316

188. Hustin, A. EXPOSITION DES BEAUX ARTS, CATALOGUE ILLUSTRE. Paris, 1892. pp. 74-75

189. Benedite, Leonce. HISTOIRE DES BEAUX-ARTS 1800-1900. Flammarion, Paris, 1906. p. 291

190. Caullery, Maurice, LA VIE UNVIERSITAIRE, ibid., p.53

191. Liard, Louis. L'ENSEIGNEMENT SUPERIEUR EN FRANCE 1789-1893, vol. 2, Armand Colin, Paris. 1894, p. 376