The Chalon Astronomer Benjamin Baillaud, and a Short History of His Bust in the Public Garden of Chalon-sur-Saône.

by Lucien Baillaud

In 2001 my brother-in-law, Jean-Marie Rouillard, met Dr. Ernest Hantz, a military physician who had distinguished himself in spring 1954 by volunteering to parachute into besieged Dien Bien Phu. In the course of the conversation, Jean-Marie learned that his neighbor had spent his childhood in Chalon-sur-Saône. He spoke to him of a bust of our grandfather, Benjamin Baillaud. Specifically, Dr. Hantz in his youth had often played around the “Baillaud” in the Palace of Justice Square. He remarked that his brother-in-law, Fernand Nicolas, edited a magazine of Saône-et-Loire and would undoubtedly appreciate an article about my grandfather and his bust. There was already the Chalon review of Mr. Henri Huet. From one brother-in-law to the other, this is how I have been led to write on these themes. All the publications of Saône-et-Loire played a part. Does my text contain errors? If so, I beg the reader to believe nevertheless in my concern for accuracy and to accept my excuses. If it is too long, I have taken too much interest in writing it; may this interest be shared!

When one sees a bust in a public garden, one may wonder what happened between the time when the person lived and when the statue was erected. The author of these pages was astonished by what he learned. In particular, when he began this work he did not know that the creation of this bust was a project purely within the family without any plan to put it in public view.

Jérôme Lamy (2004), in his thesis on the Toulouse Observatory, warns against the illusions that can lead to errors in any biographical enterprise, particularly when one relies on obituaries. One is obligated or tempted to put himself more or less in the place of the subject, in his time and his social milieu; empathy is hazardous or even presumptuous. May the text of this second edition approach the truth.

In the Beginning

The Chalon astronomer Benjamin Baillaud, my grandfather, was born 14 February 1848, in the attic of a building [Figure 1] that my young niece by marriage Virginie Gaiffe, when she lived in Chalon, was able to identify with the help of a long-time resident: it was number 9, Place de l’Obélisque, a building which long had on its ground floor the Brasserie du Tonneau d’Or, renowned, according to Henri Huet, for its oysters [Figure 2].

His father, Joseph Baillaud, was the son of a failed winegrower from Mesnay, near Arbois. However, as a young man he had studied at the private middle school of Dole. As for military service he was unlucky; he served seven years. After having contributed to what was called the “pacification” of Algeria, he married a retired captain’s daughter, Zoé Jouvenot-Lefebvre, who was devoted to the Catholic faith. He had bought on credit for 8000 francs a position as bailiff in Arbois. He succeeded with great pains and more and more difficulty in paying his predecessor the heavy interest on his debt. After five years he was happy to resell the position in order to pay it off. He obtained a position at the sub-prefecture and then at the city hall of Chalon-sur-Saône. It is said that at Arbois he had known Louis Pasteur; at least he had known residents of Arbois who knew their illustrious fellow citizen. Here, I hazard a guess: for making his own professional career he knew that education is a valuable aid; for making the career of Pasteur, he could not ignore that the Ecole Normale Supérieure was an excellent social springboard at that time. Without evoking what is often an unhealthy aspect of ambition, I mean that he knew that studying was not a waste of time. His son Benjamin knew that as well.

Joseph’s family included seven children, of whom two died young. Family allowances did not exist then; family resources were meagerly augmented by the mother with a little grocery business. It was very
desirable that the children earn their living as soon as possible. Benjamin thought that he owed much to his older sister Emma, a substitute teacher, for not having to work for pay during his youth. He said that it was a great advantage for a child to have an older sister.

Scholarships offered by the municipality (rare at that time) allowed Benjamin to study at the Chalon Middle School. After graduation, his teachers advised him to seek a teaching job, but that had never been his intention. He obtained the renewal of his scholarship from the municipality, allowing him to go to the lycée in Lyon preparatory to enrolling in the École Normale Supérieure. For additional assistance his uncle, Louis Baillaud, who had a modest job as an accountant on Châtelet Street in Chalon, moved to Lyon where he found a job; the young student lived with him for two years. One could not foresee that much later Benjamin would assist several family members when they were in need. At twenty-one, he left the Ulm Street School, a graduate in mathematics, a teacher at the lycée in Montauban. Pasteur, the director of the School, noted that Baillaud was to some extent his compatriot, but it did not go much further to my knowledge. The institution of competition was a great democratic tool for the development of the nation.

Professional Debut

A significant positive effect of his stay at the École Normale Supérieure [Figure 3] was his friendship with the future mathematician Jules Tannery and the future physicist Edmond Bouty [Figure 4]. Besides having similar outlooks, the three were united by common principles, such as good citizenship, and a taste for science. Much later they were together again in the Academy of Sciences, but in the meantime Benjamin married Hélène Pons, a sister of Edmond’s wife (from Laisac), and Jules married Benjamin’s sister Esther (from Chalon), establishing strong family ties. First their children and then their grandchildren had a strong mutual affection, and one of them, Jean Tannery I think (or their cousin Gabrielle Billaudeau?), spoke amusingly of a “mutual admiration society.” Besides, coming out of the monastic life of the E.N.S. together brought the three brothers-in-law into the high-order friendly network of alumni of the École.

The years 1870-1871 saw war and the fall of the Empire. Benjamin was exempt from military service because of his ten-year commitment to teaching. But a National Guard was organized temporarily at Montauban; he was elected lieutenant-colonel, with temporary responsibility for more than two thousand men. The fall of the emperor did not really bring about the Republic. Benjamin stepped into electoral politics: he presided over an election meeting in Toulouse in favor of the republican Freycinet, and he helped found a newspaper, Le Républicain de Tarn et Garonne, hostile to the Bonapartist deputy Prax-Paris. On the latter’s request he was transferred out of Montauban and sent to the lycée at Saint-Quentin. The newspaper continued to appear, even under the Vichy government: it ceased publication in 1944.

Nothing allows me to think that Benjamin took this mutation, this sanction as a duty of officials to remain neutral in political matters. Instead, a year later he delivered a strongly Republican and anti-Bonapartist speech at a prize distribution [It was often the newest arrival who was asked to speak at the end of the academic year], which had previously been censored by the administration, but he published the full text two more times. I have no reason to believe that he afterward subjected himself consciously to republican neutrality requirements. But he thought that as a public servant, he should not publicly criticize his employer, the Government itself, or its decisions.

During the following years, Benjamin was appointed to various schools in Paris and then to the Observatory, as a student and then as an assistant astronomer. There, counseled by Charles Delaunay, Charles Hermite, and Victor Puiseux, he considered several subjects for his thesis and declined to travel to observe the transit of Venus across the Sun in December 1874. He devoted his thesis to the perturbations of the motions of comets. Le Verrier, the feared director of the Observatory, appreciated Benjamin; he chose him to help at the Sorbonne. A hard worker, he wrote to his future brother-in-law Edmond Bouty (22 June 1872; he was 24): “I cannot … conceal that I’ve always had at the bottom of my heart a little vanity and much ambition. … I do not lack patience and even energy. … I will be working … as hard as a man can, and if I am needed, you will find me ready to put my knowledge to the service of science and my country.” Did he feel the temperament of a “locomotive”? If he had not been fundamentally dedicated and selfless, one
could say that perhaps he was a “young Turk,” but, and this is a critical nuance, as he himself explained (21 April 1873): “I have always been ambitious, although I have forgotten how to be a plotter.” Also, the unfolding of his career makes me think, on a more earthly plane, of the Gospel parable of the talents when I read what he wrote to his wife, 13 June 1875: “I owe to everyone the success of my position. I must go as far as possible. I have a firm determination.” Mr. Brion, a teacher in the Chalon Middle School, to whom he owed much, wrote him (3 January 1878): “[…] You have what it takes to succeed: intelligence, perseverance and good health.” For some time it was a question whether to propose him to be director of the observatory at Toulouse or at Bordeaux.

The defeat of 1871 had impressed government officials: Germany, rich in universities, was flourishing and triumphant. It became urgent to develop the universities and scientific institutions in France. This is an idea that Louis Pasteur had proposed to public authorities. Benjamin Baillaud had expressed this with vehemence in 1871 in a speech at the awarding of prizes, a speech of which he distributed reprints to increase its dissemination. In this case he saw a possibility to contribute to this development.

The Observatory and the School of Sciences at Toulouse

In 1878, at the age of thirty, B. Baillaud was sent to Toulouse to teach astronomy in the School of Sciences and to direct the Observatory. He would be formally appointed the following year. At the time he had four children, Émile (1874-1945), Jules (1876-1960) and twins Henri (1877-1939) and Madeleine (1877-1961). Four more would be added: Marthe (1882-1978), twins Pierre (1885 - 1906) and René (1885-1977), and Hélène (1892-1976) [Figure 2]. For children of a large family, to be lodged in an observatory house was incredibly fortunate, promoting visits by friends and classmates. But back to the father of the family.

A mathematician by training, he was known throughout his career for his mathematical research, for numerical calculations of definite integrals, for wave surfaces, for his publications of positional astronomy and celestial mechanics, on the theory of perturbations and mechanical quadratures. He took great joy in astronomical observations themselves, and he tried to achieve unusual precision in observing sunspots, comets, the satellites of Saturn and Jupiter, occultations of stars by the Moon, double stars, the nebula in Lyra, etc. This work was excellent while being, according to his [astronomer] son Jules, on the same level as that of many other astronomers. He also worked in other areas.

For thirty years he developed the Toulouse Observatory, which he made the leading French provincial observatory, for its equipment, staff, scientific activity, and by the organization of the work, which could be compared, according to Jérôme Lamy, to that of a “minutely regulated factory”. A large visual equatorial and a great telescope had been ordered by Félix Tisserand, his predecessor. He also acquired a meridian circle and a photographic equatorial. He personally oversaw the completion of the domes’ foundations, and in particular the construction of the pillars of the instruments, measuring the accuracy of the observations. He neglected neither meteorological observations nor the measurements of terrestrial magnetism. And let’s not forget the development of the Pic du Midi, which for a long time specialized in geophysics.

The journal Annales de l’Observatoire de Toulouse, a collection of work done in the establishment, had been published before. In 1880 he relaunched it, producing the first volume of a new series, published in Paris by Henri Gauthier-Villars. This series continued to appear until 1968.

Regarding the dissemination of knowledge to the public, he gave a popular astronomy course illustrated with slides (photographs and drawings). The public was invited to visit the observatory. His institution participated in the Universal Exhibition of 1900, showing photographs of the Moon and various images of the sky.

He very actively involved his observatory in one of the first international scientific projects, the Carte du Ciel, or Photographic Map of the Sky, launched in 1887 by Admiral Mouchez, Director of the Paris Observatory. In matters of science, Benjamin Baillaud was an enterprising astronomer-mathematician, perhaps inclined primarily to develop, in his observatory, the fields of his competence. Using modern
photographic techniques of the era created by Paris astronomers Paul and Prosper Henry, it was a new way of describing the stars, “a capital work,” Ernest Esclangon, the Director of the Paris Observatory (known to the general public for the realization of the speaking clock), later said a little pompously, “which contains the seeds of admirable discoveries, as it will, in the future, permit knowing the movements of the stars, and discover the laws which govern them ...” One could at least think so. Whether this expectation would be verified or not in a grandiose manner, in any case at Toulouse, the Carte du Ciel demanded of Benjamin Baillaud a great deal of organization, calculations, and publications. It was a strong stimulant for the development of observatories that participated and particularly that of Toulouse. Eight or ten women were assigned to make the necessary measurements and calculations [Figure 11]. In the nineteenth century, women were sometimes associated (anonymously) with scientific activities. Admiral Mouchez had done the same in Paris. At Toulouse, Lamy emphasizes, the women worked in a separate room. Eighteen observatories worldwide agreed to collaborate in this work. It involved photographing the sky in detail and measuring the positions and magnitudes of an enormous number of stars. It was thought that in five or six years all the photographic plates would be taken, that in fifteen or twenty years the whole work would be completed. It was a trap. It took more than half a century, and in 1958 the publication of plates was stopped (about half of the total had been published), and in 1964 the catalog was completed. [The contemporary historian of astronomy] Jérôme Lamy thinks that the most important result of this participation in the Carte du Ciel was to show the value of international cooperation.

After the founding of the republic, many administrative managers had been replaced by younger persons, open to new ideas. In 1879, the position of dean of the School of Sciences of the University of Toulouse became vacant. I assume the outgoing Dean, appointed in the early days of the Empire, aged 66, proud of his 44 years of seniority, a zealous dean for over 25 years, but scarcely open to change, had been politely invited to retire. The choice of the new dean was up to the Minister. The President of the university, Chappuis, proposed Baillaud: “This is a man of great sense,” he wrote, “and of the strongest character ..., he is a very intelligent man and very hardworking, very dedicated to the University with liberal ideas, who by his character will act as a leader of the professors, by his devotion he will have the best influence on students of the School.” He was appointed. The youngest of his colleagues was fifty-seven; he was thirty-one.

For some years, some disquieting rumors had been circulating. The President had reported them to the higher administration, but proof was lacking. Baillaud had just been named dean when the scandal broke. The practice of recommendations for the examinations was then tolerated, even if their efficacy was in no way demonstrated. The worried mother of a candidate for the bachelor’s degree tried to recommend her son to the professor of mathematics. The wife of the professor replied in writing: she needed a thousand francs. Her husband would be very sympathetic to the young man and she could count on his success. The letter was circulated. It was commented on by a satirical newspaper in Toulouse, La Guêpe (The Wasp) (16 November 1879, and again on the 23rd). The new dean alerted the President. This led to the premature retirement of a professor. One hundred and ten years later, the affair had been forgotten, and the municipality gave the name of this professor to a street in Toulouse, but at the time, in 1879, Baillaud was stunned and severely angry, very, very angry. In addition, as a practicing Catholic with a punctilious impartiality in the exercise of his profession, he was very shocked at the ostensible relations of that apparently corrupt family with the clergy of Toulouse.

These events resulted in a vacancy for a professorship in mathematics. In his eagerness, he immediately sought to fill this chair, aiming high. He did not get the nomination of the young Paul Appell (24 years old), but he managed to appoint, contrary to the prevailing notions of the day that preeminent Parisians would not care to work in the provinces, a Paris lecturer of very high reputation, Émile Picard (age 23), a future permanent secretary of the Academy of Sciences.

Given the paltry number of students and the insufficient number of faculty in the School (nine professors and lecturers for all of the sciences), he persuaded the ministry to create some new positions, even if that was certain to lead to justifiable requests from other universities’ science schools. This was particularly necessary, for the government at that time was developing secondary education and needed new teachers for its schools. He put in place laboratory requirements, which were an innovation in Toulouse. He organized a course to prepare for the graduation examinations. The number of students in the
School increased.

Encouraged by the appointment of Émile Picard, when positions were vacant, he always made sure to get professors of the highest possible level, despite some resistance from his colleagues. His brother-in-law, Jules Tannery, at the École Normale Supérieure, was an excellent advisor, to help him identify really valuable people, and he also benefited from the advice of his other brother-in-law, the physicist Edmond Bouty, the mathematician Gaston Darboux, and Félix Tisserand, with whom he was close. From 1884 to 1902, the director of higher education was Louis Liard, his classmate at the École Normale. These then are other personalities of the first order that he appointed to Toulouse: Henri Andoyer, Marcel Brillouin, Eugène Cosserat, Aimé Cotton, Édouard Goursat, Gabriel Koenigs, Jean Stieltjes or Ernest Vessiot, and Paul Sabatier also, the future Nobel Prize recipient, balanced with an honest scholar who had rendered services to the School but perhaps did not carry his weight. Naturalists were not forgotten as he chose high level scholars. Many of these lecturers returned rapidly to Paris, to continue their careers, but they gave an exceptional and durable luster to the institution.

From 1810 to 1879 the Faculty awarded an average of 2.75 master’s degrees per year, from 1880 to 1897, an average of 15 per year.

The premises of the School, on Lakanal Street, were miserable. He had decent buildings constructed in the grounds of the Jardin des Plantes (1889), on “Saint-Michel” Street, according to plans drawn up in collaboration with his colleague Sabatier, after a preliminary draft developed in 1884 in Laissac with Paul Sabatier and Edmond Bouty.

To encourage the scientific work of Toulouse he founded, in 1887, the *Annales de la Faculté des sciences de Toulouse pour les sciences mathématiques et les sciences physiques* (*Annals of the School of Science of Toulouse for Mathematics and Physical Sciences*), also published by Gauthier-Villars. After more than a century this publication continues to be published each quarter, now covering mathematics only. He planned to launch the equivalent in natural science, in cooperation with the Veterinary School and the publisher Masson, but nothing came of it.

Medical studies lacked a scientific basis. The School of Medicine was unable to provide it. One remedy was to organize in the School of Sciences a year of scientific studies, to be taken after the baccalaureate and before entering the School of Medicine. It was at Toulouse that the experiment was attempted, in 1891. It is said that this was the first time the Ministry of Education tested a reform before inaugurating it. The system of a certificate of physical, chemical and natural sciences (PCN) lasted, with various changes, some eighty years, until the time when the evolution of secondary school programs and that of the schools of medicine have enabled the latter to take over that education for themselves.

To the opening of the School of Sciences to doctoral programs and to medicine, achieved by Benjamin Baillaud, was added, starting with his deanship, the development of the applied sciences, led by Sabatier.

Meanwhile, in Benjamin’s family one heard expressions of regret that administrative responsibilities had been entrusted to him so early, in the prime of his life, hindering his own work. That was the opinion of Edmond Bouty, who had the confidence of Tisserand, the director of the Paris Observatory [from 1892 to 1896]. Baillaud remained dean nine years. The government then decided that the deans should be elected. If one has the right to vote, it is not to retain the administrator imposed earlier by the authorities. I suppose that his colleagues reproached him as too authoritarian. Even Sabatier, it was said, voted against him. Another dean was elected in 1888, who resigned two years later without completing his term. Benjamin was not a candidate to replace him, but he was elected anyway for three more years (1890-1893). The reform of entry into medical schools dates from this last term. We often joke, and sometimes with reason, about the “taste for power,” or even “the intoxication with power” of those who assume responsibilities at any level whatsoever, but we are happy that there are people who do it, and I hope that my grandfather found pleasure in it, though his twelve-year deanship sufficed. The School of Sciences of Toulouse University was truly rebuilt.

He spent another fifteen years at the Toulouse Observatory, freed from the management of the School
of Sciences. But he had an active temperament. In 1893 and 1897 he published two volumes of his astronomy textbook, eight hundred pages, which I think was a completely new work, and not just a summary of his lecture notes, and in 1905 two volumes of the correspondence of Hermite and Stieltjes. In 1907 he was chosen as secretary of the council of observatories. During his stays with his parents-in-law in Aveyron, he was amazed by the clear starry sky in that region. He thought of establishing an astronomical station nearby, at Le Massegros in the Lozère department. It was in the territory of the Academy of Montpellier. He made contacts, which were unsuccessful. But, at the suggestion of the [Toulouse University] President Perroud, he founded the astronomical station at the Pic du Midi, contrary to prevailing opinion, justified or not, that observations from a mountaintop would be hampered by rising air currents. It was then one of the highest altitude observatories in the world. The images were of exceptional beauty for the time. I do not dwell on the necessary steps, the number of times that my grandfather climbed the Pic du Midi, the transport by rough paths, and the installation of instruments, on the astronomical observations in which he personally participated, etc. To make an astronomical observatory at the Pic du Midi does not happen in the blink of an eye, as has been shown in the work of E. Davoust and of J.-C. Sanchez.

**An Election in Paris**

When he was appointed to Toulouse in 1878, he came from participating in the activities of the Paris Observatory and the Sorbonne. Did he find that he was wasting his time while in Toulouse? On several occasions he planned to continue his career in Paris, at the School of Sciences or the Observatory or both. In case some are wondering, I say that the correspondence does not permit me to attribute his Parisian aims to the simple sentiments of vanity (hopes of being elected a member of the Academy) that others have attributed to him, but more to the wish to enlarge his responsibilities. Appointments depended on several votes. When positions appeared to be coming vacant, his brother-in-law Bouty, as early as 1882, inquired of his chances for success. It was customary for candidates to personally visit each of those who would vote. It happened that Benjamin, for a position at the Sorbonne, planned a campaign of “visits” which appeared to be promising, but he did not follow up. He would want it to be accompanied by a post at the Observatory, but he learned from H. Poincaré and E. Bouty that the director, Maurice Loewy, would not permit this, and besides, he and his family were still very attached to Toulouse.

A bitterly contested election in 1907 led to his appointment in 1908 as head of the Paris Observatory. The circumstances of this appointment were the subject of several twists and turns that are still surprising today. There were several candidates. The Minister was supposed to seek the advice of the Academy of Sciences and the Council of the Paris Observatory. Apart from any consideration of the worth of the men, the competition was fierce between Baillaud, a university astronomer who had devoted much of his time to organizing the work of others, exhibiting experience at being responsible for a scientific institution and his competence in the field, and Guillaume Bigourdan, a full-time astronomer, who had been able to exploit fully his expertise in observing nebulae and to gain a reputation for his own work, or even between the provincial, who, consequently, was “only” a correspondent of the Academy of Sciences, and his competitor who had been based in Paris for twenty-eight years and who was a member (and the son-in-law of a former member) of the Academy. The weekly sessions of the Academy promote friendly working relationships. Henri Poincaré, linked to Bigourdan, had very loyally written to Benjamin that he would vote for Bigourdan, including the fact that they had common interests. [See http://www.univ-nancy2.fr/poincare/chp/text/baillaud190712.xml] The differences in qualifications between the two candidates seemed to Poincaré “not strong enough” to “harm the future of a longtime zealous collaborator. to counteract the reasons that I might have to vote for him.” He recognized the superiority of the candidacy of Baillaud. I do not know whether Poincaré thought Baillaud would not need his vote to obtain a majority, nor do I know whether he sent his written advice to the state to support his candidacy.

Bigourdan, who had not come from one of the “Grandes Écoles” made a show of his Catholicism; it was said that he was supported by a sort of “clerical” group, including Poincaré of École Polytechnique. Baillaud, a graduate of the École Normale Supérieure and a practicing Catholic also, was supported by another graduate of the school, Paul Painlevé, also a mathematician and a radical socialist. It was legitimate
for the specialists to become, among their colleagues, advocates for one candidate or another. Several kinds of divisions could have influenced the choices of Academy members. I do not know whether there were discussions between proponents of one faction or another, if indeed there were factions. I don’t know whether there were backstage dealings. Benjamin Baillaud remained for many weeks in Paris, urging his wife to keep abreast of what the press said about him in Toulouse. I don’t know how many visits he was able to make.

Jérôme Lamy (2004, vol. II, p. 718) tells of the letters received by the Minister: Baillaud heard that he was represented to the Minister as an active clerical; it was rumored that he was an official of his parish. Lamy (p. 719) says that Baillaud adopted “a very subtle line of defense”: not to reply himself to these insinuations (I don’t know the grounds for this assertion) and to mobilize his most influential friends. He confided in his rector, who wrote (15 December 1907) on this subject to the Director of Higher Education: “He [Baillaud] has always behaved as a good and loyal servant of the Republic,” and “if he does not conceal his religious beliefs, he does not slack either.” Perroud evoked another of the political activities of Baillaud, in mounting a feeble candidacy, 26 years earlier, for the municipal council. I don’t know whether this was in response to questions from the government or simply to complete and balance the political side of his testimony on the religious discretion of my grandfather. Dr. Robert Loewy, son of Maurice Loewy [the previous director, whose death on 15 October 1907 had created the vacancy], wrote (19 December 1907) on Baillaud’s behalf, but I don’t know whether this was at the suggestion of Benjamin; I know nothing of the relations between them: Bigourdan is an “active clerical.” On his side, Bigourdan wrote to the Minister (23 December 1907), “some accuse me of being capable of acts of intolerance,” and he defended himself against this charge.

It is difficult to know to what extent such considerations influenced the secret vote of the members of the Academy and other personalities, who, overall, were probably not easy to manipulate. But these unusual interventions took place just before the meeting of the Observatory Council, a non-independent body. And four years earlier, by an unexplained decision of the Minister, the undisputed historian of science Paul Tannery (brother of Jules), a Catholic, had been ousted from a chair in the College of France, for which he had been proposed as first choice at the time by both the Assembly of professors and the Academy of Sciences. Serenity could not rule.

The Academy began on 9 December 1907 with a meeting of the “secret committee” of the five sections of mathematical sciences. Baillaud led for first choice with 13 votes to 12 for Bigourdan, the latter for second choice by only 13 votes against 12 for an outsider, General [Antonin Léon] Bassot, a member of the Academy. I know nothing of the course of this meeting. On 16 December, the whole Academy (including chemists, naturalists, etc.) voted. It is said that the Academy’s custom was never to vote against a fellow member; yet on the first ballot, Baillaud [not yet a member] got 31 votes out of 62, Bigourdan, 29, and Bassot, 2. There was a second round, and Bigourdan led with 32 votes. It was only for second choice that Baillaud led with 42 votes. It was claimed that the minister should follow the vote of the Academy [which presented him with Bigourdan as first choice and Baillaud as second]. Eager to inform their readers, some newspapers on 17 and 18 December prematurely announced that the new director would be Bigourdan.

The Council of the Observatory met on 19 December with eleven members present, most of whom presumably represented the wishes of the government: four representatives of government departments (the director of higher education and three “others”) and seven members of the Academy, mathematicians in the larger sense, including Painlevé and Poincaré; the president was the permanent secretary of the Academy [Gaston Darboux] and the secretary the man who would be the 1908 Nobel Prize winner in physics [Gabriel Lippmann]. The vote confirmed that of the section of mathematical sciences on 9 December: Baillaud received nine votes for first choice (and Bigourdan two), for second choice there were seven votes for Bassot, three for Bigourdan, and one blank ballot. Bigourdan was not even listed for second place: was this a gesture of respect for Bassot, or hostility toward Bigourdan, or a maneuver to force the hand of the minister, or on the contrary, to help the minister in his supposed opposition to Bigourdan? The vote was sufficiently consistent with that of the secret committee of the Academy. On 20 December the appointment of Baillaud was presented as probable by the newspapers. It was announced on 6 January 1908 (Decree No. 2, Journal Officiel (Official Journal) No. 9). I don’t know whether the arguments for affirming this
In April 1909 he organized an international conference to advance more actively the implementation of the Carte du Ciel. Of this work one of his two astronomer sons, René Baillaud (my father) said: “Castle in Spain? This castle was then very large and very distant”; its completion required more time than was initially supposed. [Actually, it was never completed.] Benjamin was elected chairman of the permanent international committee of the Carte du Ciel, and he took over the international effort. His other astronomer son, Jules, took the task to heart and devoted much of his own energy to it.

Benjamin Baillaud was also interested in the “ephemerides” published annually by astronomers for navigators, who had only the stars to find their way in the oceans. An international conference was held in 1896. The Bureau of Longitudes, headed by Bigourdan, called another, at the Observatory, for the harmonization of the calculations and the coordination of the work of the observatories involved in this activity in October 1911. Attendees agreed on the adoption of the Greenwich meridian, the choice of the fundamental stars, and various other items necessary for the harmonization of the essential nautical almanacs published by Britain, France, Germany, Portugal, Spain, the United States, etc.

Since 1880, the Paris Observatory had disseminated the time manually, via telegraph. The determination of the time, ever more precise, was a concern of astronomers from all countries; it was closely linked with the determinations of longitudes. Benjamin participated in the first precise measurements of longitude using the telegraph and radio: in 1911, between Paris and Bizerte [in Tunisia], in 1912, between Paris and Uccle, near Brussels …

By 1908 the Bureau of Longitudes wanted to install a time service with signals sent from the Eiffel Tower. The cooperation of B. Baillaud and the future general Gustave Ferrié allowed sending time signals starting 23 May 1910. In 1912, it was under the auspices of the Bureau of Longitudes, which had held a conference devoted to the determination of time, followed by a second international time conference held from 20 to 27 October 1913. This had led in 1912 to the creation of the Bureau International de l’Heure (BIH) [International Time Bureau], which had its headquarters at the Paris Observatory, centralizing data from different observatories and broadcasting the time by radio as precisely as possible (some said this may have contributed to the decision not to dismantle the Eiffel Tower, from which the signals were broadcast, but the issue was settled long ago). The war came before the international ratification of the official creation of the BIH. So Benjamin assumed the effective management and operation of the BIH from 1912 to 1919 unofficially. He carried on the task by the strength of his own hands. Every day, he wrote, he examined the details of the clocks in order to give the corrections needed to send the signals. Two of the astronomers remained working alone throughout the war, making comparisons of clocks and sending signals. Hélène, his wife, wrote to Benjamin: “You tell me that you will provide the time everywhere, and this will be very good, but the expense will be enormous and the responsibility very great. Poor darling, if you only had 50 years ahead of you, you would do great things.” [Figure 8, Figure 9]

After the Great War, the “war to end wars,” the very last war, not yet called the “First” World War, the International Council of Research was founded. Benjamin Baillaud, convinced of the importance of international action, took a large part in this initiative. After a meeting in London (9-11 October 1918), another took place in Belgium from 18 to 28 July 1919. Specific scientific groups were created, the “International Scientific Unions,” the first of them the International Astronomical Union (IAU). The American astronomer Harlow Shapley wrote to me (31 March 1967): “Baillaud was a man to whom you could apply the adjective ‘kindly.’ He was a natural internationalist and was therefore very effective in the good-will programs of the IAU.” I do not know whether my grandfather thought that there was here a responsibility he should not shirk and expressed his candidacy. Baillaud was elected the first president of the Union. He presided until the Congress of Rome in 1922. After that he kept retiring. At the beginning the IAU incorporated some thirty commissions. It was he who had proposed in London the term “Union,” which has been used ever since. After the war the general problem was to organize the peace, and what a problem! The astronomers could try to participate. He spoke with some grandeur of these “Unions which contribute more each day to the establishment of concord at the top, between peoples,” (letter dated 8 September 1930). The “top” obviously did not mean governments. The IAU meets every three years, playing the role of international coordinator of astronomers’ activities. For example, I mentioned earlier the conference on ephemerides of 1911; now it is a division of the IAU, which coordinates the question. The name “Union” was taken over by groups in other scientific fields; currently they are overseen by UNESCO.
decision had been influenced by the hostility of some to the political or religious views of the candidates. In February he was elected a Fellow of the Academy of Sciences, well ahead of other candidates, something significant, even if the gesture was for the Director of the Observatory rather than for him personally.

A batch of more than one hundred fifty newspaper clippings from the Argus de la presse and the Courrier de la presse, collected (I assume) by Madeleine Privat, provide an interesting side of the story. Attacks against Baillaud had commenced before the appointment, on 17 December; they were not based on his alleged clericalism but on the contrary, on his alleged political activities on the left. Here is an overview of the criticisms that the press could have imagined against the appointment of my grandfather. For L’Écho de Paris (6 January 1908) “He had a career as a teacher in various schools and middle schools. Astronomy was for him something of a hobby.” Already, on 22 December 1907, the same Echo de Paris said: “It is a question of knowing whether Mr. Baillaud, who is highly competent in such matters as imposing schoolboy punishments, has a real competence here [in astronomy]... Mr. Baillaud, who after an honorable career as a professor, had devoted his retirement to astronomy.” In L’Éclair on 23 December 1907: “Science recommends one, politics favors the other.” What politics? I did not find any articles favorable to Baillaud and accusing the “clericals” (perhaps the prestige of Poincaré made him untouchable?) On the other hand, L’Écho de Paris wrote on 22 December 1907, “the radical socialists of the Academy, led by Mr. Painlevé, have led a passionate campaign in favor of Mr. Baillaud, the great radical socialist of Toulouse. In L’Eclaireur de l’Oise on 9 January: “a militant bloc pulled strings by the [freemason] lodges.” Slightly more nuanced, L’Univers et Le Temps on 8 January wrote, “Mr. Baillaud is at the same time a knowledgeable astronomer and an excellent antireligious militant....” A last-minute coincidence pointed out by l’Intransigeant on 9 January: the Minister, Aristide Briand, signed the appointment just before the entrance into the government of Mr. Cruppi, a Deputy for Toulouse; the possibility of an intervention by Cruppi amused the family. Some said it was not the first time the government overrode the recommendation of the Academy. Several newspapers, which had copied the misinformation from the others, reversed themselves, “Mr. Baillaud on whom an occasional correspondent had recently given us poorly documented information ...” (Le Jour and Le Signal, 8 January, La Justice 9 January). The controversy was over, at least for the newspapers ...

**At the Paris Observatory**

Across France, the scientific expansion following the disastrous war of 1870 came to an end; for example, in order to increase the annual salary of professors in the Collège de France from 10,000 to 12,000 francs, the decree of 22 September 1913 resulted in the removal of three professorial chairs from the institution. The decade that followed the 1914 war was deplorable. The scientific staffs of universities remained unchanged until the end of the Second World War. In a slightly acidic obituary notice (Les Nouvelles littéraires, 12th year, 14 July 1934), the popularizer Marcel Boll spoke about French astronomy, as in a “period of decline ... due to the smallness of the appropriations complemented by obliviousness.” It was from 1908 to 1927 that Benjamin Baillaud had to direct the Paris Observatory. This period, divided by the Great War, was particularly unfavorable to the development of science in France. This circumstance, and his personal temperament, explain why his main achievements were coordination, the organization of work.

Several brief biographies present him solely as an expert in celestial mechanics, omitting his work in founding and developing international institutions. The authors relied on the brochure prepared for his candidacy for the directorship of the Paris Observatory, and acted as if he had done nothing afterward.

One of his first goals in Paris was “to ensure completion of all work in progress,” [Le Verrier’s revision of] Lalande’s catalogue [which would be completed in 1933] and others. Perhaps because of his participation in the Carte du Ciel and its international conferences, Benjamin was, scientifically, an internationalist. Compared to his past in Toulouse, his concerns changed scale. It is maintained that under his directorship the Paris Observatory developed its international relations and thus achieved renown and a global importance.
Since the IAU presidency would absorb a large part of his activity, he gave up the responsibility of the committee on the Carte du Ciel, whose presidency was turned over to the Englishman Herbert Hall Turner.

The International Bureau of Time [BIH] was maintained throughout the duration of the war by Benjamin, who had also developed an alternate site at the Parc de la Tête d’Or [a park] in Lyon, in conjunction with the radio station at [nearby] La Doua. The time signals were never interrupted, but they would not have been even if the equipment in Paris had been destroyed. The establishment of the service from Lyon was the only opportunity during the hostilities for Benjamin to leave his position for three or four days. Too old to be mobilized, he believed that the state of war required a maximum effort and sacrifice of everyone for his country. In 1919, the BIH was placed under the responsibility of the IAU. It was as president of the Union that Baillaud then entrusted the leadership of the Bureau to Guillaume Bigourdan, the astronomer with whom he had competed for the directorship of the Observatory. Having shown the utility of the Bureau of Time and having operated it until 1919, it seemed to him time to give way to another. Bigourdan also had a taste for detailed calculations that made him particularly suited to this work. The BIH was responsible for the unification and dissemination of time worldwide. It operated until 1988, when its activities were transferred to the International Bureau of Weights and Measures at Sèvres for the atomic definition of the length of the second and to the International Earth Rotation Service (IERS) at the Paris Observatory, which measures the motions of the poles and is responsible for calculating time.

Another important initiative, in 1925, was the establishment of an optics laboratory, in which the American George W. Ritchey and the Frenchman André Couder developed optical equipment for French observatories. It operated until Couder’s retirement in 1968.

Benjamin Baillaud was an enterprising and far-seeing man. Were there mistakes, disappointments?

He had devoted much of the work of the Toulouse Observatory to the Carte du Ciel. However, while this weighty project took up much of the time of French astronomers and used a large share of available funds, other areas of astronomy grew elsewhere, in America, for example. The Carte du Ciel has been widely held to be responsible. The young historian of science Jérôme Lamy and the astronomer Philippe Véron have strong reasons to believe this. But some disagree. Perhaps the question is not simple, because many French astronomers were not involved in the Carte du Ciel. For example, there was at Meudon an observatory specializing in astrophysics, directed by Henri Deslandres. Moreover, without the Carte du Ciel, would astronomy have received the same funding? For a long time French observatories had hardly any instruments built after 1890: funding for large instruments seemed to have dried up. On the other hand we must not forget that it was in France that the Great War did the most damage; nearly all fields of science suffered a decline at that time. Finally, the Carte du Ciel, that could be judged necessary for the ultimate knowledge of the movements of the stars themselves, was systematic inventory work, as is done in all the sciences of nature and which, at that time, was thought worth doing. It was, in itself, the exploration of a new level of knowledge. It was continued by International Astronomical Union Commission 24, first called “Stellar Parallaxes,” later “Stellar Parallaxes and Proper Motions,” and finally “Photographic Astrometry” before being merged into Commission 8 “Astronomy” in 2000. The Carte du Ciel Catalogue is used today for comparing the former positions of the stars with their current positions. Despite its age, it is not obsolete, rather it is a very valuable document, though less important than was foreseen when it was created.

At the Paris Observatory, Benjamin was struck by the poor quality of the atmosphere (an observatory is among other things a place where one observes), and for years he made great efforts to move the observatory or to create another station outside the city. He found what was a concern for many of his predecessors: the Paris Observatory had been built on the edge of the city; it had become one of the few major observatories in the world that was not on a mountaintop and far enough away from cities to observe the sky in the best conditions. He met with insurmountable obstacles, budgetary and human. In particular, Mr. Davoust told me, the Parisian astronomers were accustomed to supplementing their modest pay with ancillary activities, which would have become impossible if the Observatory were moved too far from the city. In 1913 the decision was about to be taken. In 1914 there was talk of going to Rochers de Saulx in Ballainvilliers, near Corbeil [just 20 km from Paris]. The war intervened. Afterward Benjamin did not
cease to work for a better location. The chosen site was kept secret, presumably to avoid land speculation. It was now an area of about six hectares [fifteen acres], estimated in 1924 to cost 245,000 francs, located at Champlain, south of Massy and east of Palaiseau, not far from an area that had become a mecca for science. It was planned to seek five million francs. However, a violent controversy was very painful to him: his efforts resulted in failure. We must recognize that despite the Paris air pollution the Paris Observatory had not ceased to be a vital center for astronomical research. If pollution significantly reduced the number of stars visible, it did not affect the excellent precision of position measurements. In retrospect this transfer project seems a little ridiculous, considering the development of the Parisian metropolitan area and considering the capabilities that today’s instruments give us in earth orbit. But did not the vain attempts of Benjamin help maintain the idea that there needed to be a large observatory outside of Paris? and the decision to build the Haute-Provence Observatory?

Retirement

The age limit for his position was seventy; it was seventy-five for members of the Academy. The choice of his successor was intertwined with the government plan to merge the Observatories of Paris and Meudon. This consolidation allowed for better coordination of work and reduced the number of official positions. This established a new institution, which allowed the Minister to make an appointment without any prior consultation. Did he hesitate on the choice of the new director? I have no idea. Until the appointment, in 1929, of Ernest Escangon, this could hardly be other than the director of Meudon, Henri Deslandres, who was five years younger than Baillaud. On the express request of the Minister, Benjamin Baillaud was kept in his position until 31 December 1926, when he was nearly seventy-nine.

He had one child in Paris and two in Toulouse. [Mme. Baillaud had died in 1920.] Retiring to Toulouse, he lived near his sister Emma. He took a lodging at 4 Place Saint-Georges, very near 14 Rue de la Pomme (where his son Henri had his optical shop) and near 14 Rue des Arts, home of his daughter Madeleine (Privat). That could not prevent him from going to Paris, Marseilles, Nice, or Barcelona to see his other children [Figure 6]. He maintained his relations with the scientific community by writing a book, *On the History of Stellar Astronomy of Position*, which was never published but was released in mimeograph form.

He founded the Friends of the Observatory and the Institute of Earth Physics of the Pic du Midi. He gave his library to the observatory.

The bitterness caused by the failure of his attempt to establish a branch of the Paris Observatory was tempered by many honors: the awarding of the Bruce medal of the Astronomical Society of the Pacific (an international distinction for an astronomer) in 1923, a doctorate *honoris causa* from the University of Cambridge (1925), the title of Grand Officier de la Légion d’Honneur (1927), announced by a personal letter from the former Prime Minister, Edouard Herriot, Minister of Public Instruction, commending him for services rendered to French science and their influence in the world, and what was probably the most touching, before his leaving for his retirement, a warm visit from each (“except the illustrious N” [Charles Nordmann], he wrote) of the officials of the Observatory. In 1930, it was announced that a street in Chalon-sur-Saône would bear his name. He was very moved. [Figure 10]

He died at Toulouse, aged eighty-six, 8 July 1934 [Figure 7]. At his funeral, the former dean, Nobel laureate Paul Sabatier, said he “fell asleep in the eternal hopes that his Christian faith had never ceased to believe in.” With Alain Alcouffe, I think this affirmation well expresses the common-sense secularity maintained at the University of Toulouse under the direction of Perroud.

Benjamin Baillaud, the Man

His private correspondence among his own family shows him as conscious of his duties, as sure of himself
and authoritarian at the time of the childhood of his first children (even short-tempered, said his daughter Marthe, until his sister Emma ordered him to control himself). He was the head of the family. “There are things,” he wrote his wife (8 May 1909), “that are my responsibility, where I am better informed [...] and when I insist on something, it is best that you think that I am right.” His wife had remained near her parents; a friend lent her novels. She wrote twice to her husband to ask whether she could read them. The answer was negative (“these are not worthwhile books”). It was not the time of triumphant feminism, but she could stand up to him.

For example, she stopped him from running for office on the city council of Toulouse, because his expertise was in science and not elsewhere (he had been on a list of “Republican Union” candidates in the first round of elections on 9 January 1881; he was not on the list for the second round). I have not heard that he had any subsequent political activities. Nothing in his correspondence would suggest it, apart from his sympathy with social ideas of the left and his regret (“It is too bad,” he wrote) that politicians of generous feelings “cannot add two and two.” If he did not seek political engagement, to my knowledge it was not out of caution with respect to implicit requirements of his position, as has been said, but to obey his wife, who wished that he stay out of politics.

But he was full of simplicity, affectionate attention, and generosity. He was willingly helpful and his home exceptionally welcoming. Young people of Aveyron, related or not, were able to undertake at Toulouse studies which would give them rewarding careers. His wife told one of them: “You will be our ninth child.”

He was often asked for “letters of recommendation,” and, to my knowledge, he wrote them without favoritism. Once he refused angrily, when someone wanted him to ask his friend Liard to support a candidate in an official contest. He was angry to think that someone thought he had for a friend a man who was capable of that unworthy action. However, he intervened effectively to the Minister after the death of a colleague, a family man, who died just before the thirty years strictly necessary for his widow to receive a pension.

On 12 October 1891 he wrote to his wife:

I only see you in the world and our children are yours as much as mine. I’m happy in your love, and their good and loving feelings. You are my whole life. As much as I have seemed to be occupied with the work entrusted to me, I can say openly that these concerns have been secondary for me. My real life is in you and my children, who are ours, and the first form of our immortality. I’m glad to see you happy, sweet. These children are good. They take after their mother, and no quality is more important. That’s the cure for all ills, for all the difficulties of life in this world, for all temptations. Keep them this way. They will work, if only for good. They will understand, as they grow, that there are people who suffer, who lack the necessities, who have neither the well-being that allows a pleasant life, nor the joys and religious and moral consolations which are the real life, and which give true happiness. They will conclude for themselves that being privileged in the midst of so many people who suffer, they must repay, through their work and dedication to others, all that they have received from society. The education they receive, they owe to the society that has well rewarded the efforts of their father. They owe much to their mother who has devoted all of her time and all of her efforts to them, and who has herself received from society noble and elevated feelings which are the most enviable charm. They will want, when their turn comes, to be good for everyone, be able to make their work render to their less fortunate fellow citizens all they have received. I have full confidence in all of them. They will never forget these feelings which seem to their father the most urgent duty, the debt I owe to others. They will continue to pay when I am no longer able to do so. It shall be increased by what they will receive.

He wanted to be loyal, and, after his appointment to head the Paris Observatory, to owe nothing to intrigues or favoritism, having the right to “walk with his head held high” and look at himself in the mirror, as they say now. He claimed that he owed the essentials of his character to his wife. He wished above all to see develop in his children “goodness” (a term now almost obsolete) and a sense of duty. His wife, educated in a convent in Rodez, held firmly to this. He spoke with solemnity when he spoke of duties in
general, but he practiced them without speaking of them, without ostentation.

How did he conduct himself in the exercise of his profession? I have to rely on testimony: relations marked by undoubtedly benevolent and paternal authority, but perhaps without leaving sufficient room for discussion, cordial kindness, simplicity, even modesty, intense activity sustained by optimism, tenacity and firmness. Despite the classic image of the absent-minded mathematician and the astronomer lost in the moon, he was a realist.

Under the Empire, after a political disagreement with the authorities, he had joined the collective resignation of students of the École Normale Supérieure. But at the time of the Dreyfus affair, he regretted, according to his son René, that his brother-in-law Jules Tannery had signed the manifesto of intellectuals published 14 January 1898 in support of Zola’s “J’accuse.” A government official should not publicly take sides, even with good reason, against the government, he felt. I have no reason to suppose that in this attitude he was motivated by the hope of looking good to his superiors.

In 1916, during debate on the introduction of summer [daylight saving] time, he said that time is a reality independent of the will of man. To want noon to be at eleven o’clock would be a lie, “It can not be without fatal consequences,” he said, “to base people’s lives on a lie.” I hope he did not foresee society sliding toward the decay of moral principles and contempt of prohibitions. But it was war, several of his sons and sons-in-law fought on the front, one of his nephews and several of his close relatives died for France. All considerations must yield to the necessities of the moment. There were at that time serious reasons to save energy. Regardless of what he had said before, he gave the Academy of Sciences favorable advice for the seasonal change of time.

A man of order, he told his daughter Marthe that he believed in God because he preferred order to disorder. Undoubtedly, it simplified his thought. He respected traditional values and their representatives. Thus, when he received at his table in Toulouse a former priest from Laissac (his wife’s hometown) who had become a bishop, he followed standard protocol and had the bishop preside over the meal. His grandson Alfred Baillaud became a priest. Alfred told me that his grandfather addressed him with the formal “you” on the day when, as a seminarian, he wore a cassock. But he was not clerical in the negative sense of the word.

In the Semaine Catholique de Toulouse (Toulouse Catholic Weekly) we read the conclusion of a series of popular lessons on astronomy: “The astronomer … asks what is the origin and what is the fate of the Universe. … Finding no answer, … he senses another Being, of an infinitely higher nature.” This indirect public allusion to his faith is closer to the secularists who ruled at the University of Toulouse, firmly secular but tolerant. The President, who was once a freemason, had cordial relations with strong Catholics, like Emma Baillaud, whom he appointed director of a girls’ high school. In 1892 Mrs. Perroud [the President’s wife] had been godmother to Baillaud’s eighth child. Friendly relations would not have lasted so long had they been based only on skillful diplomacy and not on sincerity.

In the turbulent circumstances of the time, Benjamin tried to manage his career. By ability? Was it clever when he ran in municipal elections? And when he gave up? When he had good relations with the clergy? And with the Freemasons of the city? When he asked his university president, in 1907, to testify against slander? I have only a vague visual memory of my grandfather, but I knew several of his children, raised by their parents based on rigorous principles: I do not claim that they had absolutely all good qualities, but they were guided by a sense of duty and sincerity, by concerns of generosity and rectitude, but not by a desire to navigate pitfalls and opportunities. This is the best approximation I have of my grandparents.

His role as dean had given him a wide circle of acquaintances, among academics and some government officials, in addition to some neighbors of the observatory. However, I do not have data on relations with the bourgeoisie itself, the social class he could rub shoulders with in learned societies and whose qualities he appreciated, but he did not share their means nor probably their tastes. Edouard Privat and his son Paul, booksellers and printers of the Archdiocese, were among the closest relatives because they were from Aveyron (cousins of cousins). It was through Benjamin that the University President, a
historian, met Paul Privat, laying the groundwork for a lasting collaboration with the one who was called (in 1897) the “bookseller of the University.” These people could meet at the observatory, or in the salon of Madame Perroud, or at the home of “Aunt Emma,” Pauline Kergomard joined them on occasion. An ardent feminist from a Protestant family, she provides another example that the Baillauds did not mind friendly relations with those who had strong differing beliefs.

For him, “what man has received from God and society, he must pay back.” He saw his employment as an obvious necessity, presumably as a pleasure, but for him it was primarily a service to perform, at best, a bit like the “duty to the state” referred to in that time. In 1871 he had the opportunity to dishonor publicly the mentality of the previous era, during which, he wrote, “everyone counted the days until he could retire... “that is to say, enjoy his work without making any more service to society.” He did not pretend to scorn the honors that were the recognition of his efforts: when he became a Chevalier of the Legion of Honor, he wrote to his wife: “it is definitely a stage of my career, I have only to get back to work to reach others, but above all to continue to render some service.” When he was elected president of the International Astronomical Union, a gesture of confidence for the start of a new task, with the confidence of a lifetime of work, he wrote, “The game is won! ... This is the greatest honor I could aspire to,” and he rejoiced in the joy it brought his children. He considered ambition to be a “social duty” for each according to his individual talents. This formula did not put him in opposition to his brother-in-law Edmond Bouthy, who said, “Beware of solutions that suit you,” that is to say, the rationalizations for our own desires. No, Benjamin, who despised the meaness of careerism, wanted, it seems clear to me, to do his best to be as useful as possible in order to justify the sacrifices that others had made for him.

He retained a great appreciation for his hometown. He wrote (8 May 1909): “I have received everything in my life from others. I did not take a step without being materially aided. As a small child, I was able to go to middle school because the mayor of Chalon gave me a scholarship; moreover, I could go on to Lyon only because it was renewed.” He remained amazed at the pleasure the people he knew in Chalon felt in helping others. He regarded this as a form of socialism “to give to some what we have received from others.” And indeed he did.

Unexpected testimony came from a reporter: he was charged with obtaining temperature records. Each evening he had to travel to the Observatory at the other end of Paris. Baillaud, who met him often, asked him one evening, “Are you paid for this task?” “They give me two francs per day, and the Metro is at my expense,” he was told. “Good,” said Baillaud. Don’t bother coming here any more, my friend. From now on you will receive the information by pneumatic tube.”

A Half Century Earlier: The Sculpture of a Bust

Four years after his death, the Alumni Association of the Middle School of Chalon-sur-Saône began work to place a bronze bust of Benjamin Baillaud in the Courthouse Square. Where did they get the idea? Where did they get the bust? Despite its size, it was not intended for public display. It had been carved in October 1886 by a Toulouse School of Fine Arts professor, Henri (known as Henry) Maurette (1834-1898). The School’s president, Claude Perroud, wrote of the sculptor that his style, somewhat academic initially, had grown as he matured.

Sculpture as portraiture was popular in the nineteenth century; it lent itself to smiles and debates. The journalist Henri Rochefort wrote in La Lanterne, 11 July 1868: “The Emperor of Russia has just sent to the Prefect of the Seine his image in marble with which he pays homage to the city of Paris. This gift brings to thirteen the number of busts placed in the gallery called the Sovereigns. Thirteen busts! I’m curious to know which will fall within a year.” An episode of another kind: the sculptor Jean-Baptiste Carpeaux, creator of a number of busts, conceived the idea of a marble statue in honor of a fellow native of Valenciennes, the painter Antoine Watteau. It took twenty-four years of talks before its implementation ... in bronze! Now at that time, after the Empire, the young Third Republic may have needed new people to honor, and this paved the way for new dignitaries to be “statuified” after their deaths. It must also be said that photography, which owes so much to the famous Chalon resident Nicéphore Niépce, was not yet common: a photo was
admired as a “likeness.”

An enigmatic correspondence. On 16 October 1886 Benjamin wrote to his wife, who was at the home of her parents: “I started going to Mr. Maurette, who asked me to keep it secret;” on the 17th he wrote “… to go to Mr. Maurette from 10 am to noon. … The bust should remain secret until it is finished.” Then: “I must go to Mr. Maurette’s tomorrow. I will go Monday, Thursday and Friday at 10:15 am and other days also.” On the 19th: “… stayed an hour and a half at Mr. Maurette’s, who in this session roughed in my head. I will return Thursday, Friday and Sunday for this week. He is an amiable conversationalist and we understand each other.” On 21 October: “… already the bust emerges … Monday he had made only a head, without clothes on the torso. Today, on arrival, I found it with shoulders and a coat, he has put on a decoration.” On the 23rd: “He worked yesterday on the right side of my head: I think tomorrow it will take shape.” On the 24th: “I go to Mr. Maurette, for a long session.” On the 26th: “My bust is starting to take shape. I wore my robe yesterday for that purpose, it is much better than the minutiae of ties, coat, etc. … I will return Thursday and Friday from 2 to 5. Then he will make progress, and Mr. Maurette will give me eight days off.” On the 27th: “Tomorrow and the day after I will go to Mr. Maurette.” On the 28th: “I go again from 2 to 5 to Mr. Maurette’s, my bust is making progress. He will work on it during my absence.”

Jacques Baillaud, current possessor of the terracotta bust, has noted that there is no signature or date. Here are the dimensions measured on a cast: the base: 14 cm high, 44 at the greatest length, versus 32 in width; bust: 60 by 64 by 37 cm; circumference of the head, about 75 cm. To see the final result, I am tempted, wrongly, to think that the sculptor has aged his model, but in reality, the portraying of subjects as “young and dynamic” had not yet come into fashion. On the contrary, it was said that young doctors wore useless spectacles to look older.

**Current location (in 2011) of the busts:**

The original bust in terracotta, sculpted by Henry Marquettere in 1886: Corneilla-la-Rivièr. [Figure 14]

Mold in pieces: Ayrinhac.

Authentic replicas in plaster, dated or undated from 1887: Chalon (Denon Museum) [Figure 12], Garches, Laissac, Nant, Sévérac-l’Église.

Second bust sculpted by Maurette, in marble, dated 1890: Toulouse Observatory[Figure 12]

Bust in bronze, cast in 1937, after the terracotta of 1886 or a plaster replica from 1887, or the mold already made with the addition of the rosette of the Legion of Honor, erected at Chalon in 1938, disappeared during the Occupation. [Figure 13]

A cast of the preceding, made by Georges Granger, not surviving.

A bust in stone, sculpted in 1953 by Georges Granger after the cast made from the bronze: at the Palace of Justice square in Chalon-sur-Saône. [Figure 16, Figure 17]

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We are surprised by this young (38) provincial professor, with a busy schedule, taking the time for many sittings so that a sculptor could make a large bust of him. The vainglory of a careerist? The explanation is unexpected and can be found in the correspondence he saved and which his great-grandson Henry Didier found using computers. Maurette had two daughters, schoolchildren, of which at least one was a student at a girls’ high school. He himself was an art teacher in this school, whose foundation and direction had been given two years earlier to a strong personality born in Chalon, Benjamin’s older sister, Miss Emma Baillaud (1843-1934). The artist wanted to make a gift to his principal. What better gift to offer her than a bust of her younger brother?
This did not sit well with Benjamin’s wife Hélène. She could see no reason why her sister-in-law had a bust of her husband and she did not. “Do you think,” she wrote on 20 October, “that Emma will be able to have copies made of your bust in clay and that they will be a true likeness? I am a bit jealous to see that I will not have mine.” On the 21st, her husband replied: “I think it will be very beautiful: you will be very happy. But do not worry whether you’ll have it in plaster or terra cotta. The plaster looks better than the clay.” We now know that apart from the clay there were replicas in plaster, Burgundian stone, marble, and bronze, but in 1886 they did not exist. Undoubtedly there was a promise, since on the 28th she wrote, in anticipation, “I am very proud to have your bust. If the president wanted to do something good, he would put it at the new university. I have some hope that he’ll do it.” As for Benjamin, I’m sure it was not because of personal vanity that he admired the work of the artist.

A plaster mold was crafted in many parts and some replicas in plaster, all, apparently, by the sculptor himself or under his immediate supervision. Some of these authentic replicas are hand engraved in the plaster with his signature and date. The mold, neither signed nor dated, was long kept at the home of Helen and Benjamin’s son Henri Baillaud, 82, rue des 36 Ponts, in Toulouse. It is now in Ayrinhac at the home of Henri’s daughter, Hélène Boisdon.

I like to think that the first plaster bust was presented to Hélène and was kept in the Baillaud home. Another was offered to Benjamin’s brother-in-law, Edmond Bouty, who wrote 31 December 1887, “the pedestal that you have sent us is in perfect harmony with our furniture: it is really very beautiful and worthy to carry the work of Mr. Maurette. Now it carries your bust and we put two Barbedienne wall lamps in front of the fireplace. The room is no longer recognizable.” The bust is now in Nant. Still another was given to Léonie and Marie Pons, Hélène’s sisters. It was initially in their house in Laissac, which later became the home of Marthe, the second daughter of Hélène and Benjamin. It is now in Garches, at the home of Pierre Didier, Marthe’s grandson. Two casts, signed “Hry Maurette 1887”, are currently in the Aveyron home of Madeleine and Marie-Thé, daughters of Paulette Boisdon in Laissac and in the family of Marcel Baillaud in Sévérac l’Église. Undoubtedly my grandparents did not assign them to anyone. Another was at the home of Henri Baillaud, at 82, rue des 36 Ponts. It broke; it might be the one in the Toulouse Observatory. There is one, also in plaster, in Chalon-sur-Saône. Why?

The Chalon industrialist family, the Pinettes, were very close to Baillaud. The young substitute teacher Emma Baillaud had taught, “as a little student,” Paul Pinette (1865-1932), son of Gustave (1838 - 1923). Benjamin wrote in 1933: “Gustave Pinette, for me, is that courageous factory owner who, sixty years ago, asked me to be his partner in his business. I could not accept, not sure of having the qualifications for this position, but we have been perfect friends.” The two families looked for occasions to meet, in Chalon, at the Pic du Midi, or elsewhere. A copy of the plaster bust of Benjamin was offered to Gustave Pinette. It was customary to send a photo to one’s friends, a bust was rarer. In 1933, after the death of Paul Pinette, this bust, neither signed nor dated, was donated to the Denon Museum in Chalon by Paul’s son Gustave Pinette, Jr. (1897-1966). It is in the museum catalog of 1963 under number 321 (Inv. S. 72). The catalog suggests: “this is perhaps the model of the bronze bust exhibited at the 1894 exhibition.” No, the exhibition catalog from 1894 mentions the latter (no. 3381, page 289), but nothing suggests that it is Benjamin Baillaud, nor that the “Baillaud” of Maurette was cast in bronze at that time.

On 23 February 1887, Benjamin’s eldest child, Emile, wrote to his younger brother, Jules: “The bust of dad is magnificent, he poses in his robe. They’ll make it in marble, because Aunt Emma wanted the terra cotta and the plaster, and Mr. Maurette said that since it was like that, he would sculpt it in marble for dad and will make plaster copies for each of us when we grow up.” All this did not happen, but a new bust was actually carved in marble, signed “Henry Maurette 1890.” I assume it replaced the plaster bust in the home of Hélène and Benjamin. When the Baillauds left for Paris Observatory, documents relating to the move list a bust of 200 kilos. Benjamin took it with him when he retired to Toulouse. I assume that after his death his children gave it to the Toulouse Observatory. It is currently in the library of the Midi-Pyrénées Observatory of Toulouse, with his predecessor, the Burgundian Félix Tisserand (in plaster), at 14 Avenue Edouard Belin. It bears the inscription “Baillaud Benjamin (1848 -1934), Directeur de l’Observatoire de Toulouse (1879-1907) “.

In the catalog, *Cinq siècles d’astronome Toulousaine (Five Centuries of Toulouse Astronomy)*, edited
by the Municipal Archives of Toulouse, you can see on page 184, a photograph of the measurement room, the room of the “ladies of the map”, that is to say, of the ladies who did the measurements and calculations necessary for the Photographic Map of the Sky (the ladies, who counted by stating “seventy”, “eighty” or “ninety” [they used an archaic form, still used in Switzerland] to limit the risk of errors); in the middle of the picture is a bust of Benjamin Baillaud, very white; I assume in plaster. Today we think it wrong to have a bust of the head of an establishment in a workroom. It would be called paternalism, or worse. So much has changed since that time it would not be fair to make a moral judgment, in fact the atmosphere was warm at the Observatory and the staff had an affection for the director, and besides, one must not forget the prestige of the talented Toulouse sculptor Maurette. I would like to believe that the bust was placed there for a photograph.

[Image of handwritten letter to Gustave Pinette, 1933]

The Tribute of Chalon-sur-Saône

I do not know the circumstances (introduction by a teacher?), but Benjamin received in Toulouse an alumnus of the Chalon School, Louis Montangerand (1866–1943). On 6 October 1883 he wrote to his wife: “I found this young Montangerand, who seems very good, at Toulouse. I gave him the cot because he had brought only a mattress, blanket, pillow and sheets. For his meals, the easiest thing will probably be to have him board in town, which will make him walk a bit. Write to me about it.” After arriving in Toulouse at age seventeen, Montangerand continued his studies at the Lycée (specializing in mathematics), then the School of Sciences [at the University]. He worked with much energy throughout his career as an astronomer at the Toulouse Observatory. After the death of its former director, he wrote about him in the Bulletin of the Alumni Association of the School of Chalon-sur-Saône, in which is found: “The writer of this obituary is proud of having been a friendly disciple of the great Chalonnais whose loss we deplore.” He could not have been unaware of the existence of the bust; the association leaders could see it at the Denon Museum. I would not be surprised if Montangerand played a role in triggering the Association’s initiative, in cooperation with the two kingpins of the Benjamin Baillaud Committee, Émile Dodille and François Tremaux, former director of Le Progrès de Saône-et-Loire, who represented the committee in Toulouse.

The Alumni Association appointed a commission to study the issue. On 20 May 1935 the Association Council took under consideration the suggestion of F. Trémaux to place a marble plaque on the house where Baillaud was born, with the inscription “Dans cette maison est né Benjamin Baillaud ancien élève du Collège, directeur de l’Observatoire de Paris, membre de l’Institut 1848-1934.” [Birthplace of Benjamin Baillaud, alumnus of the College, Director of the Paris Observatory, and member of the Institute 1848–1934.] A circular will be sent to all the members of the Association inviting them to contribute. A meeting was held 19 March 1936. The second project proposed was a bronze bust. “Our comrade Montangerand” and the Principal will provide lists of persons to solicit for contributions. “Our comrade Gaston Petit, a talented sculptor,” will be consulted. In 1938 at the Salon of French Artists Petit (1890–1984), who had been a student of Injalbert, exhibited a stone bust of Pierre Mauchamp. Petit worked in Paris; would he help? Could he provide a rough estimate? They spoke of 10,000 to 35,000 francs.

The Association launched a subscription for the erection of a bronze bust in a public garden in Chalon. The municipality had agreed. Where would the work be done? Henri Huet found in the local press at the time that a foundry in Toulouse was preferable to the local Petit foundry. The bust would cost 2500 francs; the stele and the base would be designed by a Chalon architect. The documents lack information as to whether the bronze bust was made by the method of “sand casting” from one or another of the existing busts in Chalon or Toulouse, or by the “lost wax” method, which could have been done directly from the plaster mold “in parts” then kept in Toulouse. The Bulletin of 1937 specifies that the bronze bust is an exact replica of the one at Toulouse Observatory. One might conclude that it was molded from the latter (marble), but a careful examination of documents shows that this is an error: it faithfully reproduces the first sculpture in terracotta, or its plaster copies (see the button under the tie). It was Mr. Montangerand who solved “one of the thorniest problems … in the execution of the bust.”

On 6 December 1936, the total amount contributed “is 5336 francs; the General Council voted a sum
of 500 francs, which is not yet paid.” The municipal architect, Mr. Boullier, prepared a design for the stele, with a budget amounting to 5800 francs. Subscriptions raised 6066.25 francs, from which the costs of the bust and associated correspondence were taken. It remains to collect 5000 francs, for which members of the Association are solicited. The bronze is “deposited at the home of Mr. Et. Simon, president of the A.” From the General Assembly on 5 December 1937, we learn that the subscription was insufficient. It was proposed to leave the bust at the Museum and continue raising funds. The City Council of Chalon “voted … a sum of 400 francs, which was less than the amount needed.” I am impressed by the efforts that the leaders of the Alumni Association made in memory of their former comrade.

The bust was officially dedicated Sunday, 9 June 1938. A report and a photograph appeared in Le Courrier de Saône-et-Loire on 20 June 1938. The Annual Bulletin of the Association for 1938 contains an account of the ceremony and the texts of the five speeches delivered on this occasion. The speeches were in an elegant style, suited to the occasion.

The Vice-President of the Association, Landa, recalled that Baillaud had been among the first members of the Alumni Association of the school. In particular he thanked the sponsors of the work, L. Montangerand and F. Trémaux, who had recently died, and the Municipality, which had given the necessary authorization. He was certain that the city of Chalon would ensure the conservation of this monument. Then the bust and pedestal were uncovered. It was learned that the family had wished that the bust face the birthplace, the building at the corner of the Square of the Obelisk and the Rue de la Citadelle.

Here are the entries from the front and sides of the stele, as can be read today without punctuation:

**BENJAMIN BAILLAUD, NÉ À CHALON, 1848 – 1934, MEMBRE DE L’INSTITUT ET DU BUREAU DES LONGITUDES, GRAND OFFICIER DE LA LÉGION D’HONNEUR, DIRECTEUR DE L’OBSERVATOIRE DE PARIS.** [Benjamin Baillaud, born in Chalon, 1848–1934, member of the Institute and the Bureau of Longitude, Grand Officer of the Legion of Honor, Director of the Paris Observatory.]

**DOYEN DE LA FACULTÉ DES SCIENCES DE TOULOUSE ET PRÉSIDENT DU BUREAU INTERNATIONAL DE L’HEURE ET DE L’UNION ASTRONOMIQUE INTERNATIONALE.** [Dean of the School of Science of Toulouse and President of the International Bureau of Time and of the International Astronomical Union.]

**ERIGÉ PAR SOUSCRIPTION OUVERTE PAR L’ASSOCIATION DES ANCIENS ÉLÈVES DU COLLÈGE DE CHALON, LE 19 JUIN 1938, MONSIEUR NOUETTE ÉTANT MAIRE DE CHALON.** [Erected by subscription by the Alumni Association of the School of Chalon, 19 June 1938, Mr. Nouelle, Mayor of Chalon.]

The Mayor, Georges Nouelle, said that Benjamin Baillaud, from a family of seven children, was educated at a private institution, then the Brothers' School, then at the middle school from the age of nine, then Lyon High School, thanks to city scholarships. Then, throughout his career he retained the Burgundian accent. He said that a Chalon highway was named Benjamin Baillaud. As for the city of Chalon, “for aiding the child in his early years … the city brought glory to itself.” The president of the Academy of Toulouse, Joseph Deltheil, outlined the work of Dean Baillaud at the Observatory and the School of Science. He recalled, for example, the creation of the Certificate in Physical, Chemical and Natural Sciences (P.C.N.), taken before entering the medical school. Students benefit from a year of scientific studies. It was in Toulouse that the P.C.N. was first tried. The Director of the Paris Observatory, Ernest Esclangon, outlined the work done at the Toulouse and Paris Observatories, especially the work at the latter by his predecessor, such as installing a time service in 1910 with the first scientific broadcasts of time signals by radio.

After these speeches, the guests visited the Denon Museum, then dinner was held at the Royal Hotel. The menu does not appear in the Alumni Bulletin, but it is not indiscreet to disclose the wording with all its items defined and all the capital letters:

Menu offered by the Alumni Association of the Chalon-sur-Saone Middle School, on the occasion of the inauguration of the bust of Benjamin BAILLAUD:

Red and white burgundies, 1929 Chambolle-Musigny, Sparkling Rully.

Coffee, liqueurs

19 June 1938. Royal and Grand Hotel.

[Image of the menu, in French]

After dinner, they heard a speech by Benjamin’s eldest son, Émile Baillaud, Secretary General of the Colonial Institute of Marseilles. “I am blessed,” he said, “being able to remember my grandfather and my grandmother and I recall they were quite content in their humble dwelling in Chalon.” He evoked “the austere dignity … characteristic of the serious lives of the past,” and he thought it was not only the scientist who was honored on this occasion “but this family of Burgundy, … as a symbol of all the virtues of its people.” He recalled the memory of his Chalon aunts Esther and Emma and above all that of his mother. Émile’s sensitivity was basically that of an artist. He ended his speech by highlighting the talent of the sculptor Maurette who “deserved the fame that his modesty had reserved for his students” because he had many students, including several Rome Prize recipients and renowned artists such as Alexandre Falguière and Antonin Mercier.

Photos of this bronze bust appear in the Bulletin. We notice right away his medals, the academic rosettes of an Officer of the Palms and an Officer of the Legion of Honor. An anomaly may strike the reader. It was at the time Maurette made his sculpture in 1886, that Benjamin was named Chevalier of the Legion of Honor (decree of 15 October 1886). Then why the rosette of Officer? Was this a usurped title? an illegal wearing of an uneared decoration? an anticipatory exaggeration by the sculptor? Not at all. Back to the sources. No, the clay bust, the mold pieces, the plaster replicas, the marble bust, all bear the simple cross of Chevalier of the Legion of Honor. For the bust in the Denon Museum, then in storage, my niece by marriage Virginia Gaiffe, perched on a ladder, checked it herself. So the rosette was added after the fact, when casting the bronze bust for the Palace of Justice Square. The face is the one that the sculptor modeled in 1886, when the rosette, that would not be awarded until nearly fifteen years later, was not shown, but it did amply show his age. To do so, one could have given him the insignia of Grand Officer, to which he was entitled, at age seventy-nine, but the addition of this decoration would have been more difficult and one might have aggravated the anachronism. Forty years after the sculptor's work, the face had become that of an elderly man.

The Bust Dismantled

In 1939, we were at war again. In 1940, the Germans invaded. The evening of 17 June, the German army entered Chalon-sur-Saône. It became part of the occupied area. At first, the occupiers behaved “correctly;” it did not last. Among their most innocuous misdeeds was the removal of many bronze sculptures from public gardens. The directives are known to be from Vichy, but even consulting various archives, I was rarely able to trace them to German intervention, as if these numerous acts were not at all coordinated by written decisions of the occupiers. The impression emerges of multiple uncoordinated local initiatives, French and German, with different motivations.

In Colmar, from 9 September 1940, the German Department of Labor began to take down the statue of General Rapp. The fragments were not melted but stored, and on 5 July 1945, the statue, restored, was put back. Kléber in Strasbourg, was dismantled 30 September 1940, a symbolic act, but not melted. It was replaced after the war. Presumably the Germans did not want to see the statues of their adversaries, but perhaps a solidarity among men at arms helped prevent their destruction. In Metz, Faber and Ney remained
out of sight in the gardens of the Franciscans on Marchant Street, which permitted their reappearance after the war. Yet the war industry was in need of various metals; they were needed, whether in German or French factories.

The supposedly French [Vichy] government organized the “mobilization” (a patriotic term) of “non-ferrous” metals. Even before the introduction of a metal tax (9 February 1943), the Act of 11 October 1941 provided for the removal of statues in public places under the control of prefecture commissions. Only statues of indisputable national glories should be retained, decreed Admiral [Jean-Francois] Darlan. A circular to the prefects of 14 November 1941 stated that copper was needed to treat the vines, lead for the fight against doryphora [plant-eating beetles], and in the manufacture of tin cans. No one knew whether part of the metals collected would be actually allocated to the needs of the French. The official documents I have seen put the entire responsibility for dismantling statues on prefectures and municipalities. The reality is probably more complicated. I have not found a retrospective study of the destruction of all the nonferrous sculptures. I wonder whether, after the war, destruction committed by the French under German pressure was not attributed to the Germans.

In fact, the occupiers watched the operations, as did the French who were not officially mandated to. Thus, in Nantes it was decided to keep [the statue of] Joan of Arc and remove those of General Cambronne and Colonel Villebois-Mareuil. However, the Germans made the decision to keep Cambronne, famous for cursing the English, and put back in place the statue of Villebois-Mareuil, the “Lafayette of the Transvaal,” killed by the British during the Boer War because “the colonel fought England, the common enemy of Germany and France.” In Perpignan, the statue of François Arago was saved by the person responsible for sending it to be melted down, after an equivalent amount of metal was collected by the people. At Rivesaltes, the Minerva loaned by the Louvre disappeared without a trace. In Bordeaux, the horses of the Girondins monument were removed, it is said, by the Germans and shipped to Germany. Supposedly the Resistance stopped the shipment by derailing the train; but the local press in August 1943 states that the bronzes were taken by “the services of the Commissioner for mobilization of non-ferrous metals”, for “French industry.” The city struck a deal, paying 1,494,450 francs. They were returned intact to Bordeaux in the summer of 1945. The statue of Jean-Henri Fabre in Millau was lost, but that in St. Leons, on its way to the foundry, was intercepted at Neussargues by the Resistance 22 January 1944, hidden at Murat, then returned to Saint-Leons when the time came. For Paris documentation is in June Hargrove, Les statues de Paris (Albin Michel, Paris, 1991); Yvon Bizardel, “Les statues parisiennes fondues sous l’Occupation,” in Gazette des Beaux-Arts, 1974, pp. 130–148; Georges Poisson, “Le sort des statues de bronze parisiennes sous l’Occupation,” Paris et Île de France, Mémoires, vol. 47 (2), 1996, pp. 166-198; and Lin Young Bang, “Les statues de Paris de 1870 à 1940”, Diplôme d’études supérieures, Institute of art and archaeology, 1961, manuscript CP 3404 of the Historical Library of the City of Paris, but for the dismantling one should search in the National Archives or the Paris Archives.

There is material for many specific studies. I could not find anything on how these things happened in Chalon-sur-Saône. Statues that disappeared include those of François Chabas, a nineteenth century Egyptologist, Dr. Mauchamp, a Chalon doctor murdered in Marrakech in 1907, and Benjamin Baillaud. Without proof we say that it was in 1941, Mr. Guignardat tells me 1942. We will return to the circumstances, perhaps exceptional, of the abduction of these sculptures. Ms. Patricia Sermet tells me that the people of Chalon had hidden the statue of Nicéphore Niépce.

After the war, reactions in France were diverse. Some rejoiced, even at the disappearance of these sculptures from their squares; they considered them outmoded. On the other hand there existed reparations for “war damage”: I have not heard that there have been any for this kind of damage.

In the Palace of Justice Square there remained a pedestal, a stele which bore explanatory inscriptions and was surmounted by two iron rods, the remains of the bolts that had secured the bust. The whole was heartbreaking. However, the journalist Claude Elly writes to me, Chalon is a city of old carnival traditions. Those who like to dress up and play tricks in the streets have been renamed “Goniots,” that is to say, badly dressed, bad “Gones,” and they have a fictitious king named Cabache, served by members of a royal order, Goniot. Now I let an essential actor, Yves Guignardat, express himself, “We were a group of about thirty from Chalon, all alumni of the Middle School, students in the universities in Paris, Dijon, Lyon or
We founded the “Traditionalist Society of Gôlois” in which I was a Vergobret [Celtic leader]. My friends, Arch Druids, Druids, and Goloi, organized (like the buddies of [French writer] Jules Romain) the greatest pranks in Chalon. We would meet for all the holidays: Christmas, Carnival, Easter, summer vacation, the Liberation, 1944 to 1952. And it was great fun. A book could be written about all that we invented! We had, among others, six first prizes for “Goniot” at the Carnival, each year from 1946 to 1951. In our respective schools, we were the “orchestra conductors,” that is to say that it is who were “leading the dance” and who were responsible for hazing. It is our band which after 1946 founded in Chalon the Movie Club, the Jazz Club (I was the New Orleans jazz drummer), the Archaeological Caving Club of Burgundy, then we organized the Festival Committee (I was the “Bard” of the Goniot brotherhood), the Committee for Fairs, Rotary, etc. I was deputy mayor of Chalon and I helped to found the Niépce Museum. [Figure 15]“With regard to the bust,” specifies Mr. Guignardat, “after a night of libations in the summer of 1945, it seemed we could not possibly leave this stèle blank. There were about twenty of us to climb the walls and gates of our old school and we had stolen a beautiful bust of a bearded philosopher from the class of our former art teacher (Mrs. Colliard, whom we called ‘Mémiere’ because she was the wife of a mathematics teacher called ‘Pépiere’. This was not an astronomer. We walked with much fanfare throughout the city, singing all of the student songs, then we proceeded to the dedication with some humorous speeches, some of them in Latin. And then, as was our custom, we took a souvenir photo with a huge wooden device, a glass plate and a magnesin flash [Figure 15].” Yves Guignardat has that black and white 13 × 19 [cm] picture in his collection of 120,000 photos, which will go to the Niépce Museum after his passing.

A New Bust, of Stone

Benjamin’s children all had a deep reverence for the memory of their parents. This was particularly true of the oldest of those who remained, the Parisian astronomer Jules Baillaud, retired director of the Pic du Midi Observatory: it was he who learned with sadness of the removal of the bust and the state of the monument. He proposed to provide a “stone sculpture” or marble copy, possibly sharing costs with other members of the family. He knew a sculptor at Bagnères-de-Bigorre, Charles Bouget (since died, in 1981), son of Joseph Bouget, the great botanist attached to the Pic du Midi Observatory. Charles Bouget agreed to do the job, but he wanted to donate it, in remembrance of the excellent relationship of his father with Benjamin and Jules Baillaud. Jules still wanted to pay Charles Bouget. What price should he offer? He asked the Director of the School of Fine Arts. “But artists do not know how to hold a pen, or they are not very polite. After nearly two months, I still have no answer.” This did not prevent moving forward.

There were talks with the city of Chalon, with Mayor Georges Nouelle, who had already been in the position in 1938 at the inauguration of the bronze bust (he retained his office until 1965). Exactly, replied the mayor. The City Council, on 25 November 1952, had decided on “replacement of the busts and statues stolen by the enemy, with stone copies, made from molds kept at the Museum.” The terms used quite explicitly accuse the occupiers of the dismantling.

As a good journalist, Mr. Claude Elly referred me to the Courrier de Saône-et-Loire of 27 November 1952. This gives an account of the City Council meeting: “The Commission on Public Works agrees to accept the replacement in stone of busts and statues removed by the enemy during the occupation, but it decides to spread the costs over two years. Mr. John Rand [a socialist like Mr. Nouelle] proposes to vote the sum of 528,000 francs for the re-establishment of the busts of [François] Chabas, Dr. Émile Mauchamp, and Benjamin Baillaud. Mr. Gaudillère confirms his position on the Commission on Public Works. He does not see the need to replace these busts. Mr. Rand insists and declares that these busts are valuable to the people of Chalon. Mr. Lecorchev does not want to wait to recall the memory of these people. But to avoid the painful reminder of the time of the Occupation, it is best to wait before putting these busts in place. The R.P.F. [a political party] abstains: Messrs. Bavot, Lecorchev, Puget, Dubost, Gaudillère and Dr. Blanc. The report of Mr. Jean Randé was accepted.” We see that the two opponents of the Commission, were, at the
Council meeting, among the abstainers. The statement of Mr. Lecorche leaves us wondering, why not remember the Occupation?

On 10 May 1953, the mayor could write to Jules Baillaud that the bust was “currently at the sculptor’s” and that it “will be replaced on its pedestal in a month at the latest.” “Execution of this work was entrusted to Mr. Granger, Chalon sculptor, creator of the molds for the bronze bust erected originally.” What molds? At first I thought it was a mistake.

His granddaughter, Patricia Sermet, told me that the sculptor Georges Granger (1889-1975) came from Levallois-Perret, and had studied at the Bernard Palissy school and the School of Applied Arts. He was what one would call a skilled craftsman, marble-worker, and sculptor. He also had a business enterprise, producing, for example (but not as creator), the American war memorial at Draguignan and the Chalon-sur-Saône monument to the dead.

The new bust he made is of a quite different material from the two busts (plaster and bronze) that Chalon had known before. The sculptor Robert Rigot, a Rome Prize recipient who worked at one time for Granger, told me that it was he who worked on the limestone, a stone from Buxy called “Burgundian stone.” On this new bust, Benjamin Baillaud finds himself with two rosettes. The sculptor did not model it on the bust in the Museum. Mrs. Sermet explained to me that after the three Chalon sculptures were removed, they were first brought to Mr. Granger so that he could make casts; thus the metal was sent to the foundry, but the works of the artists were preserved. The bust of Baillaud sculpted by Georges Granger is the reproduction of a bronze bust. As for Mauchamp and Chabas, which probably had no replicas anywhere, he had molds as well. Who had carried the busts to Mr. Granger’s? His granddaughter had heard that they were Germans, a surprising fact, confirming, if true, the alleged role of Germans in the destruction.

The placement of the new sculptures therefore had to have been done in May or June 1953. Henri Huet went through the Chalon newspapers. Mauchamp is the only one mentioned. There is no indication of any official event. What became of the molds and castings made by Georges Granger? Mrs. Sermet thinks that they were destroyed. The business was sold in the 1970s, the buyer is deceased, the buildings have been demolished, houses have been built “Monot Avenue lengthened,” leaving no trace of the former building.

Years passed. The inscriptions on the stele became less and less readable. On 20 February 1988, Mayor Dominique Perben reported that he asked the technical services of the city to reconstruct the inscription as soon as possible. Mr. Huet tells me that the new plaques were affixed to the sides of the stele.

Today, subject to the weather for more than fifty years, it is the bust itself which is beginning to deteriorate. It is not certain that its rehabilitation would be cheaper than the casting of a new bronze bust.

**Conclusion**

The idea of tracing the history of this sculpture made me worry about having to be the echo of a distasteful triumphalism. I think this is not the case, even if I risk sounding biased in saying so. Since the assistance from Chalon to my grandfather in his youth, I am struck by the demonstration of an uninterrupted succession of feelings and attitudes of mutual generosity, admiration, gratitude and friendship. Some disgruntled people will say we do not make good literature with good feelings, but here it is sculpture, not literature, and furthermore good feelings are still more agreeable than the bad. It is the warmth of human relationships that you may think of when you see the busts in public parks.

I thank those who have elaborated on my grandfather’s work. In addition, the remarkable kindness of numerous others gave me information I did not know about various episodes in the history of these busts; perhaps some of the most interesting remain unknown to me. My main regret is not knowing what conversations, what comments, these various busts, perhaps unfortunately deaf and dumb, were witnesses to. I only know that in a children’s room, this big head of plaster gave nightmares to a great-granddaughter.
Memorials

On 27 September 2007 Asteroid 11764 was named Benbaillaud by its co-discoverer Ingrid van Houten-Groeneveld, at the suggestion of the astronomer Joseph S. Tenn of Sonoma State University, who has made it his mission to see that all astronomers awarded the Bruce Medal of the Astronomical Society of the Pacific are so honored.

(It has recently come to light that when minor planet 1280 Baillaud was named shortly after Benjamin’s death in 1934, the discoverer intended that it honor Benjamin. However, this information was lost, and Baillaud came to be considered by the International Astronomical Union as named for Benjamin’s astronomer son Jules.)

The crater Baillaud, located in the north polar region of the visible face of the Moon, discovered by Greek-French astronomer Félix Cherka-Lamech, appears to have been dedicated to Jules Baillaud, then (perhaps at his instigation) transferred to Benjamin.

His memory is recalled by the name of the Benjamin Baillaud dome of the Pic du Midi Observatory, by several public roads (besides that in Chalon, there are Benjamin Baillaud Street in Toulouse, Benjamin and Jules Baillaud Avenue in Bagnères de Bigorre, and Benjamin Baillaud Square in Laisseac). More recently (in 2001), an amphitheater at the University Paul Sabatier in Toulouse was named for him. His grandchildren also take pride in seeing his name in various dictionaries (and, until recent years, in the Petit Larousse). In 2009 France issued a postage stamp commemorating the centennial of the Baillaud Dome. On the occasion of the International Year of Astronomy in 2009, Guinea issued a stamp in his honor. A rue Benjamin Baillaud was named at Illkirch in 2011.

Chronology of the Busts and Questions for the Curious and for Researchers.

October 1886. First bust, clay, sculpted by Maurette, provided (date unknown) to Miss Emma Baillaud then collected (presumably, but I do not know when) by Henri Baillaud, 82, rue des 36 Ponts in Toulouse, currently at Cornelia La-Rivière in the home of Jacques Baillaud, son of Raymond, son of Henri.

1886 or 1887? A mold made, which was stored 82, rue des 36 Ponts, currently disassembled into multiple pieces, stored at Ayrinhac in the home of Helen Boisdon and her children.

1887. Plaster casts made, dated or not, 1887, one undoubtedly for Hélène Baillaud, a second, given to Léonie and Marie Pons, sisters of Hélène, was kept in the house of Léonie which became the “Privat” House, and is now at Pierre Didier Garches’, and another, given to Edmond and Emilie Bout, is currently in Nant, yet another given to the family Pinette is, since 1933, in the Denon Museum, in Chalon. A molding for a time maintained at 82, rue des 36 Ponts broke; perhaps it was Hélène’s. Two others are in Aveyron, at the Laisseac home of Paulette Boisdon’s daughters, Madeleine and Marie-Thé, and at the Séverac l’Église home of the children of Marcel Baillaud. Perhaps they had not been initially assigned; they are engraved by hand, with the signature Hry Maurette 1887.

1890. A marble bust signed “Henry Maurette 1890,” which I believe was intended for Hélène, subsequently transported to Paris, located presently at the Observatory of Toulouse: I presume after the death of Benjamin (or at the time of his retirement and move to Toulouse).

1936. The Alumni Association of the Middle School of Chalon-sur-Saone, having thought about placing a plaque on Baillaud’s birthplace, launches a subscription.
19 June 1938. Unveiling of a bronze bust in the Courthouse Square in Chalon-sur-Saone, identical to the first bust sculpted in clay by Maurette, with the addition (on whose initiative?) of the rosette of Officer of Legion of Honor. Executed by which foundry?

1941 or 1942? Unbolting of the bust, intended to be melted undoubtedly for the German war industry. Exact date? By whom? By the German engineers, it was suggested to me.

Same time-frame. Assembly, by Georges granger, of a cast, now missing, of a bust in bronze.

1945. Fake inauguration by former students of the college, a summer day 1945.

25 November 1952. City Council's decision to remake the sculptures stolen by the enemy.

6 May 1953. Jules Baillaud, not kept informed of the decision of the City Council, proposes to offer a reproduction in “stone sculpture” or marble, which would be carved by Charles Bourget.

10 May 1953. Response of the mayor (George Nouelle): A bust, carved in stone by the Chalonnais Georges granger, will be placed once more, in a month at the latest. Casting modeled after the bronze bust (and not from the collections of the Denon Museum ); he wears the rosette of the Legion of Honor. Exact date? Ceremony?

20 February 1988. Mayor (Dominique Perben) writes that he requests the remaking of the inscription as soon as possible. When was this done?

**Sources**

Several recognized scientific minds have produced publications that more or less concern our theme and highlight the special demands of historical objectivity, among them Alain Alcouffe, Emmanuel Davoust, Suzanne Débarbat, Jérôme Lamy, and Jean-Christophe Sanchez.

**First the references to publications concerning Benjamin Baillaud in his profession:**

Distribution des Prix du Lycée de Saint-Quentin. Discours prononcé par M. B. Baillaud, 10 août 1871.


For information on some of Benjamin Baillaud’s actions and their consequences, consult:


Collectif: *Le Bureau international de l’heure, 75 ans au service de l’heure universelle*, work published under the responsibility of Mr. Feissel and of Suzanne Débarbat, in which, among other things, more than fifty “Boisdon” descendants of Benjamin took pleasure in reading an article by their cousin Michel Granveaud. Observatoire de Paris, Bureau des Longitudes, 1992, 183 p.


On the installation of the bust, a fundamental document is the *Bulletin annuel de l’Association amicale des anciens élèves du collège de Chalon-sur-Saône de 1938*; see also those of 1934 (p. 42-50), 35 (p. 34-35), 36 (p. 36), 37 (p. 7-9), et 39 (p. 7).

Dr. Débarbat asked me if I would write a book on Benjamin Baillaud. No. The way is clear for someone else to do so. It would be appropriate, also, if possible, to write one on his wife. It is claimed, ironically, that if we wished to do nothing for another but only for our pleasure and our personal interest, we should never bother. Benjamin’s wife never avoided opportunities to bother herself. She was a woman of great gentleness, of inexhaustible goodness, always available to help relatives, strongly marked by a strict upbringing, always attached to her country family, always comfortable in high academic places.

**It is a pleasure to list a series of people and services whose advice was essential:**

My niece by marriage, Virginie Gaffie, assisted by a longtime resident of Chalon, identified the building where Benjamin Baillaud was born. In it was found a built-in cabinet. When I asked the precise measurements of the building, this led to contact with Mr. Henri Huet, a key person for knowledge of the city.

When the Baillauds left Chalon in 1880, they left good friends, the Pinettes. When my father, René Baillaud, wanted to write and distribute his book *Souvenirs [Memories]*, we renewed contact with this family; it had been nearly forty years. We thus had addresses; I could put various questions about the bust to Mrs. Pinette-Louzeau, who answered me, while entrusting to me a dossier titled “Baillaud”. This dossier contains, among other things, an article by Claude Elly describing the “mock inauguration,” of which I had never intended to speak. The minitel [online directory service] provided the address of Mr. Elly; this put me in contact with Mr. Guignardat;

When my uncle Jules Baillaud informed the mayor of Chalon of his wish to remake the bust, he gave copies of his correspondence to my father, who kept it. The mayor’s response included the name of the sculptor Granger, a very common name. Mr. Elly gave me some details regarding this artisan that should have led me to write to the Board of Trades. By mistake and luck I spoke to the Chamber of Commerce. There it was asked whether anyone had heard of the sculptor, and precisely one person of this organization was able to say: “He was my grandfather!” That one, Mrs. Sermet, provided me with valuable information and advised me to contact Mr. Robert Rigoit, who had formerly worked with Granger;

But I could never have understand the original story of the bust if my grandparents had not moved often, if they had not written each day as a rule, if they had not carefully preserved and classified a large amount of their correspondence, which their daughters Madeleine and Marthe Privat and their sons Henri and René have stored in the family home in Laisac, if my cousin Henri Didier had not undertaken the work of entering it into his computer, and if I had never committed the impiudence of promising him to proofread and correct, with the effective cooperation of my sister-in-law Françoise Boisdon. These letters also let me know many details that I did not know about the life of my grandfather.

This chain of improbabilities bothers me. I fear that many essential episodes are missing from my documentation, made impenetrable by other improbabilities. There is room for more explorers.

**Thank you**

Among the members of my family, I have benefited from suggestions and information from many, notably Christiane Baillaud, Gabrielle Baillaud, Jacques Baillaud, Marcel Baillaud, Paul Baillaud, Vincent Baillaud, Claude Boisdon, Henri Didier, Marie Didier, Pierre Didier, Hélène Gazeaud, Hélène Lionnet, Jean-Marie Rouillard, Françoise Sauveplane, and Virginie Gaffie. Thank you to all!
I also thank

the Pinette family of Chalon (Mrs. Marie-Hélène Louzeau),

Mmes. Lucette Akplogan and Hélène Joannelle of the Chalon city library, Mmes. Juliette Barbarin and Sylvie Taj of the Denon Museum, Mr. Claude Elly of the Journal (formerly Courrier) de Saône-et-Loire, Miss Estelle François of the Chalon Municipal Archives, Mr. Guerriaud, mayor of Étrigny, Mr. Yves Guignardat, former deputy mayor of Chalon, Mr. Henri Huet of the Chalon History and Archaeology Society, Miss Séverine Pozet of the Chalon Tourist Office, Mr. Robert Rigot, sculptor in Buxy, Mrs. Patricia Sermet, granddaughter of the sculptor Georges Granger, Mrs. Elisabeth Valot of the Chalon City Hall, Mrs. Isabelle Vernus of the Archives of the Department of Saône-et-Loire,

M.J. Arlet of the Academy of Sciences, Inscriptions and Literature of Toulouse, Mrs. Dominique Barrère, librarian of the Toulouse Observatory, Mr. François Besson, of the Popular Astronomy Society of Toulouse, Mr. Gérard Coupinet, Chief Scientist of the Pic du Midi Observatory, Mr. Emmanuel Davoust, astronomer at the Toulouse Observatory, Mr. Jérôme Lamy, historian of science, Mrs. Maryse Lecq, of the Toulouse School of Fine Arts, Mrs. Pascale Marouseau, of the Archives of Tarn-et-Garonne, Miss Françoise Perrutel, of the Interuniversity Library of Toulouse, the city archives of Toulouse,

Mmes. Annie Accary and Josette Alexandre, librarians of the Paris Observatory, Miss Suzanne Débarbat, Paris Observatory astronomer and member of the Bureau of Longitudes, Mr. Marc Loué, mayor of Champlan, Mrs. Isabelle Neuschwander of the Archives of France, Mrs. Claudine Pouret, archivist of the Académie of Sciences, Mr. Raymond-Josué Seckel of the National Library of France, Miss Isabelle Vaselle of the office of the museums of France, the National Museum of the Legion of Honor,

Mr. Philippe Véron, astronomer of the Haute Provence Observatory,

Miss Jocelyne Barthel of the Municipal Archives of Metz, Mr. Louis Berges of the Departmental Archives of Gironde, Mr. Xavier Costes of the Friends of Jean-Henri Fabre, of Saint-Léons, Mr. Bernard Dubourg of the Library of Contemporary International Documentation, Miss Maryse Goldenberg of the Historical Library of the City of Paris, Mrs. Véronique Guiiton of the Municipal Archives of Nantes, Mr. Francis Lichle of the Municipal Archives of Colmar, Mrs. Béatrice Pares, city councilor of Rivesaltes, Miss Laurence Perry of the Archives of the City of Strasbourg, Mr. Jean-Michel Tauzin of Les Peintures, Mrs. Agnès Vatican of the Municipal Archives of Bordeaux, the Departmental Archives of Puy-de-Dôme;

Joseph S. Tenn for his interest concerning my dear grandfather and to thank him for making this translation.

I am sure to have forgotten some, to whom I apologize.

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2011