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Characters in the service of Ramón y Cajal (1901-1934): the lights and shadows of his maids, driver, porter, secretary/librarian, and others

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ABSTRACT

Santiago Ramón y Cajal lived in modest economic circumstances for most of his life. This situation changed considerably after he received the Moscow Prize (1900), the Helmholtz Gold Medal (1905), awarded by a German institution, and particularly the Nobel Prize in Physiology or Medicine (1906). This income enabled him to build a small mansion, employ servants to care for it, and acquire a car with a personal driver. The well-equipped Laboratorio de Investigaciones Biológicas, created on a government initiative in 1901, was staffed by diverse professionals under Cajal's direction, including laboratory staff, a porter, and a librarian/secretary. This work analyses the influence of Cajal's staff in his personal and working life. The most relevant characters in this sense are a meddling porter who played a key role in the traumatic disagreement between Cajal and Pío del Río-Hortega, and Cajal's personal secretary and librarian, who included irrelevant information in successive publications on the great scientist, with an extreme case being the cropping of a photograph with the intention of excluding the female staff at the laboratory.

KEYWORDS

Ramón y Cajal, the maids Isidora Ballano and Hilaria Melquinza, the porter Tomás García de la Torre, Enriqueta Lewy Rodríguez, librarian/secretary

Introduction

Cajal struggled economically from his childhood, when he described his mother's "incredible sacrifices to obviate any superfluous expenditure"1(p37) and his father's modest income as a second-class surgeon. This was a constant throughout his life: his parents thought him insane when he married Silveria Fañanás with his meagre monthly salary of 125 pesetas.[2] At the San Carlos medical school in Madrid, Cajal belonged to the lowly class of "basement professors" working in dark, damp spaces shared by anatomists, physiologists, and pathologists: in other words, doctors without patients. The modest flat he rented for 80 pesetas per month was disparaged by his academic peers as "unbecoming of the gown." He was impressed by "the latest cars and the bustling of adulators," while "the poor, on the other hand, trudged up the hill of Calle Atocha, dragging behind us threadbare, nearly prehistoric overcoats" (Figure 1).[1]

His income increased when he was awarded the prestigious Moscow Prize at the 13th International Congress of Medicine, held in Paris in 1900. The award was worth 6000 (presumably French) francs, "a benefaction by no means contemptible for an exhausted purse."[1(p506)] After returning, in low spirits, from the United States, he sought

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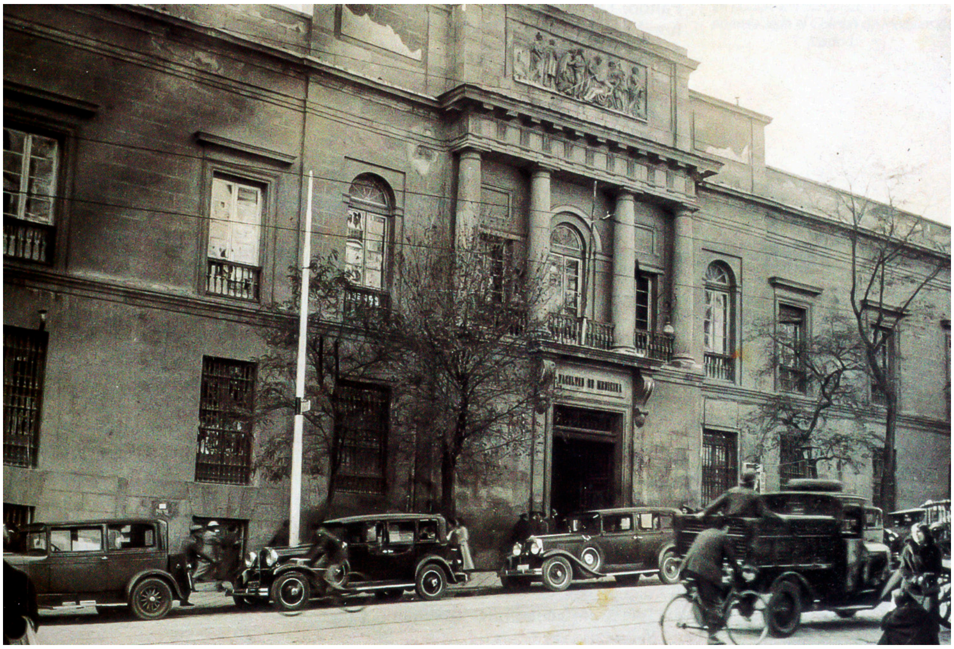

Figure 1. The old San Carlos Faculty of Medicine, on Calle Atocha, with luxury cars parked outside (ca. 1900). Source: Banco de Imágenes de la Medicina Española, RANM.

a house with a garden, and acquired his "modest orchard at Amaniel," near the circus of Cuatro Caminos on Calle Almansa, putting "all my savings into the work."[1(p506),3] The Helmholtz Gold Medal, which Cajal was awarded in 1903 by the German National Academy of Sciences Leopoldina, continued this streak of economic good fortune. In the light of this international recognition, the conservative government of Francisco Silvela, during the reign of Maria Christina of Austria, proposed the creation of the Laboratorio de Investigaciones Biológicas in Madrid (Figure 2); the centre was awarded a budget of 80 000 pesetas for research materials and facilities.[1(p512)] A lifelong dream had come true. Cajal left behind the solitude of his home laboratory to form a group of exceptional students who contributed to the universal standing of the Spanish Neurological School: Jorge Francisco Tello, Domingo Sánchez, Nicolás Achúcarro, Pedro Ramón y Cajal, Pío del Río-Hortega, Fernando de Castro, and Rafael Lorente de Nó,[4] the magnificent seven of Spanish histology. In 1922, the list of collaborators had grown to 30, all receiving their respective salaries.[5] The Board for Study Extensions (JAE, for its Spanish initials) would add several more, such as the neurologist and psychiatrist Gonzalo Rodríguez Lafora, as well as others who were later forced into exile after the Spanish Civil War, including Pío del Río-Hortega, Dionisio Nieto, W. López Albo, and Isaac Costero.[6,7]

After establishing the neuron doctrine, the law of dynamic polarisation of neurons, and the histological organisation of numerous neural structures,[4] Cajal reached the peak of his career on 25 October 1906, when the Karolinska Institutet in Stockholm informed him that he had been awarded the Nobel Prize in Physiology or Medicine. The award also included a "by no means insignificant economic aspect": 115 000 pesetas at the exchange rate of the day, which inevitably influenced his lifestyle. No longer would he live in modest rented flats: he built an elegant three-storey townhouse near the National Museum of Anthropology in 1911 (Figure 3A), moving in a few years later with his wife, some of their children, and the new household staff. Cajal lived in the house for 23 years, until the end of his life. Having retired from his university position, and seeking to escape from

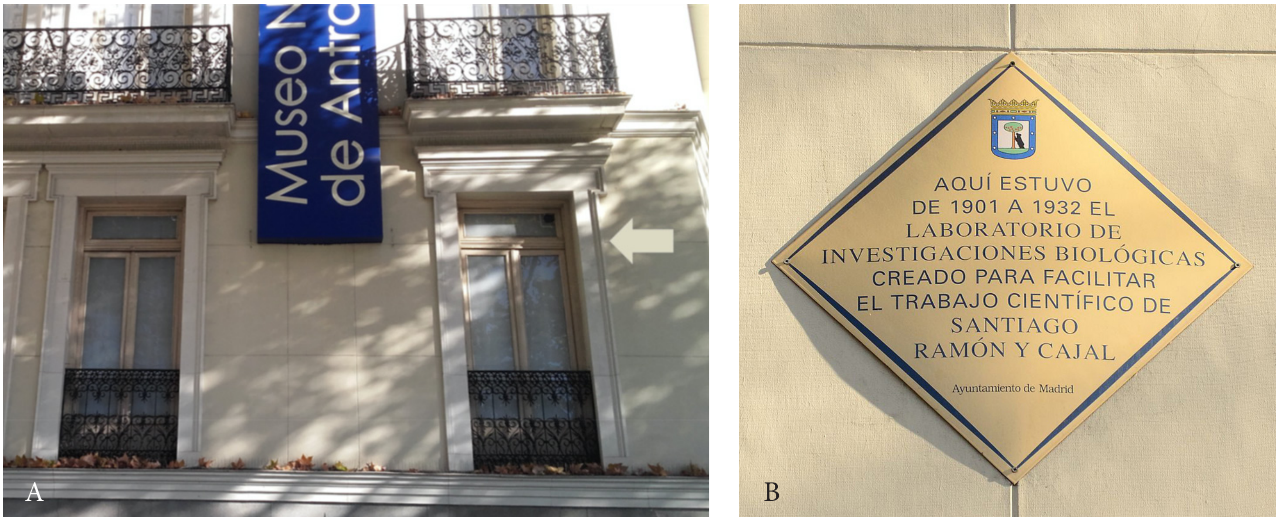

Figure 2. A) The façade of the old Laboratorio de Investigaciones Biológicas on Calle Infanta Isabel in Madrid (previously, number 13, Calle Atocha). The arrow indicates the window of Cajal's old office (photograph by the author). B) A plaque installed in recent years by the city council.

the city heat, he set up a study in his basement, dubbed "the cave" by his students, where he continued working (Figure 3B).[8]

A novel aspect that has been addressed in recent years is the role of the female neuroscientists who spent part of their careers at the Laboratorio de Investigaciones Biológicas. In addition to laboratory technicians and assistants, some of these professionals were also researchers, with key examples being the British-Australian Laura Forster, and Manuela Serra, from Madrid.[5] The latter was an exceptional figure: she was the sole author of a study, published in 1921, on the spinal cords of amphibians, using a variant of the Bielschowsky method that Cajal himself had developed. She demonstrated the presence of microglia, astrocytic mitosis, and the perivascular "sucker feet" described by Achúcarro.[9]

This study focuses on some of the staff at Cajal's home, including a housekeeper, maids, and even a personal driver, as well as non-research staff at the Laboratorio de Investigaciones Biológicas, including an opportunistic librarian, a coarse and sycophantic porter, and even a vermin catcher who supplied small animals for study. Most of them were humble, some were questionable, but none was irrelevant. This is the story of some of the minor characters who played different roles in Cajal's orbit, who help to contextualise some interesting aspects of the great man's life that we could not otherwise fully comprehend.

Methods

With the exception of some works published by Enriqueta ("Kety") Lewy Rodríguez, Cajal's librarian and personal secretary at the Laboratorio de Investigaciones Biológicas,[10,11] most of the information reported is from secondary sources. Some little-known details on Enriqueta Lewy are included in a blog post by Sánchez de Nieva, chair of physics and chemistry of the Andalusian regional government in Seville, dedicated to Dr José Fernández Turégano, who was regional healthcare minister in 1978 (www.ferrand.es). In 1918, the journalists Luis Antón del Olmet and José de Torres Bernal conducted what was probably Cajal's first media interview, with the added value of having gathered information from his wife Silveria and their son Jorge Ramón Fañanás.[12]

The culture weekly *Estampa* (1928-1935), which carried numerous images, was very popular at the time. An article entitled "El veraneo de Ramón y Cajal" (Ramón y Cajal's summer holidays) was illustrated with previously unpublished photographs.[13] Another publication with abundant photographs, *La Esfera, revista ilustrada* (1914-1931), printed a well-known image of Cajal in his laboratory.[14] The accounts of César Juarros[15] and Gonzalo Rodríguez Lafora[16] are relevant because both men frequented Cajal's laboratory at number 13, Calle Atocha. Although Cajal's autobiography does not mention the individuals addressed in this study, its 917 pages are reviewed in the 2014 work by Juan Antonio Fernández Santarén.[17] While several authors have addressed the so-called conflict between Ramón y Cajal and Pío del Río-Hortega,[18,19] the version recounted by Riera-Palmero and J. del Río-Hortega[20] offers interesting details of the unfortunate role of Tomás, the laboratory's porter. An important source of information for the purposes of this study was the municipal register of inhabitants of the city of Madrid, held at the city archives (1895-1930); at the time, residents were required to submit information every four years. Juan Antonio Fernández Santarén's[17] collection of Cajal's correspondence includes some letters sent by Cajal to his porter Tomás García de la Torre.

Results

Isidora Ballano Ramos, the faithful housekeeper

Isidora ("Dora," as she was affectionately known) was responsible for domestic duties at the mansion at number 64 (today, number 62), Calle Alfonso XII, where she lived with the family; she also cared for Cajal in his old age, from at least 1930 (according to the municipal register of inhabitants), until his final hours. This is confirmed by the gastroenterologist Santiago Carro García (1889-1966), who treated Cajal for intense diarrhoea between February and October 1934.[21,22] Three hours before his death, Cajal still had the energy to write, his hand shaking, a final message on the brain, "a wonder of evolution" (*El Sol*, Thursday 18 October 1934). The date of his death was shown on the calendar hanging on his bedroom wall: 17 October 1934; Cajal's daughter Felina noted down the exact time of death at his bedside table: "a quarter to eleven."[23]

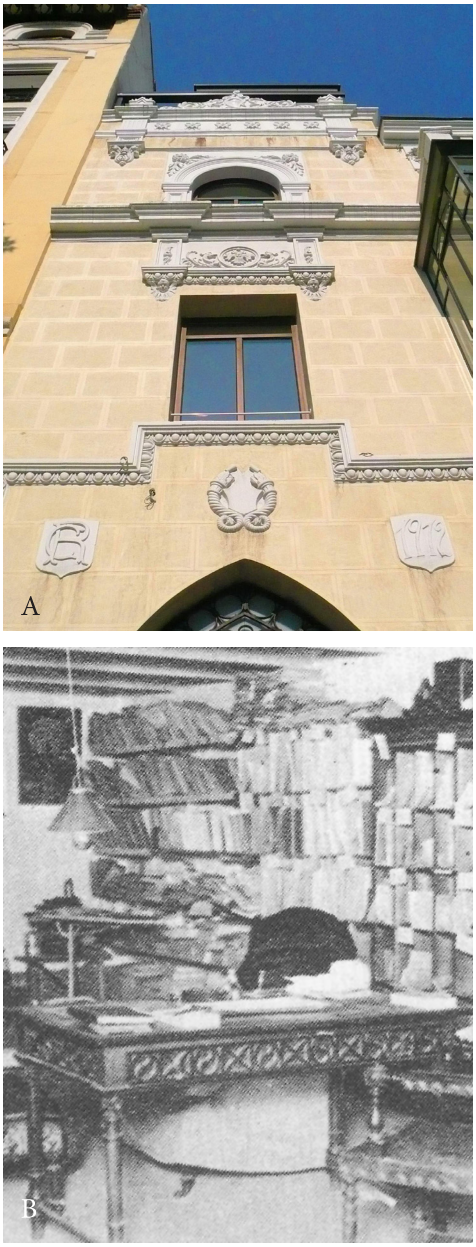

Figure 3. A) Recent image of the Cajal mansion at number 62 (previously number 64), Calle Alfonso XII. B) The interior of "the cave," where Cajal worked on an updated edition of his life's work.[8]

In his last will, dictated in 1927, Cajal bequeathed to his housekeeper Dora the sum of 1500 pesetas, attaching a surprising condition: "that she not marry, and continue providing me her services and care until my final days"; he was grateful, no doubt, for her hard work, and wished to ensure that he would remain under her care. We must place ourselves in the context of society nearly a century ago in order to interpret what would appear today to be an entirely abusive imposition. Article 793 of the current Spanish Civil Code stipulates that "the absolute condition of not entering into a first or subsequent wedlock shall be deemed as not written, unless it is imposed on the widow or widower" (Book III, Title III, Chapter II, Section 4a). In simple terms then, this condition would today be considered null and void (personal correspondence from the judge María Jesús Fernández de Benito, 24 November 2022).

These considerations led Cajal to modify the wording of the sixth clause of his will in 1931. The new wording was as follows: "I bequeath, from my one-third free estate, the sum of two thousand five hundred pesetas, in cash, to my maid Isidora Ballano, free of any expense, on the condition that she continue providing her services and care until my death."[24,25]

A theory: Hilaria Melquinza Ramos, a tragedy in Cajal's lifetime

Hilaria joined the household as an adolescent on the initiative of her aunt Dora (also a Ramos), travelling from the remote village of Anguita in Guadalajara. According to the municipal register of Madrid, by 1930 she was living with her aunt at number 64, Calle Alfonso XII. Cajal affectionately called her "*la pequeña*" (the little one), and granted her a rare privilege: only she was permitted to access "the cave," to discharge cleaning duties, along with Cajal's eldest daughter Fe, who had moved to live with her father after the death of her husband. Even Enriqueta Lewy was not allowed in, and "never set foot in the space."[19(p149)] The study was a room in the house's basement, lit by natural light from a garden courtyard and by a light bulb protected by a green screen. An interior staircase connected "the cave" with the first floor, where Cajal had installed a home laboratory and a vast library: "my spiritual pharmacy; there, I find antidotes against despair, pain, sorrow, and tedium" (María Ángeles Ramón y Cajal Junquera, personal correspondence, 2013) (Figure 3B).

Achúcarro had diagnosed Cajal with incipient cerebral arteriosclerosis, after the Nobel laureate had consulted him due to "unbearable headaches."[26] He was frequently overcome with pain in the torrid environment of the Café Gijón, where he would have heated discussions with his usual companions. He lived in terror that the headaches were the early stages of a fatal haemorrhage provoked by "cerebral congestion." This was a popular scientific term at the time, based on the supposition that verbal excess, intense study, and hot environments increased the temperature of the brain through vasodilation, as well as provoking a burning sensation in the head. Cajal was convinced of the truth of this obscure concept. Thus, speaking of his summertime chess games in Miraflores de la Sierra with the anatomist Federico Olóriz Aguilera (1855-1912), he commented that: "At sunset, having devoured our reading and humming with the excitement of the game, we would take a walk down the road to decongest our brains."[27,28] A photograph from 1898 shows Cajal with two of his children during their summer holidays in this mountain village.[28(p116)]

The diagnosis (misdiagnosis, in the opinion of today's researchers) of cerebral arteriosclerosis changed his life: he abandoned his café gatherings, seeking refuge in the gloomy basement room of Café La Elipa, near the church of San José on Calle Alcalá. Sheltering in his "cave," Cajal dedicated himself to revising his *Texture of the nervous system of man and the vertebrates*, his "life's work," which had been published more than 20 years earlier.[29,30] For that purpose, his students had found a copy of the original work in a second-hand bookshop; he unbound the book and set about inserting loose pages with updated notes and drawings. He would discard unwanted sheets, and the floor was often covered with several layers of papers.[27(p222)] Alongside this chaos, the ever-thicker volume sat on the cluttered shelves with no real protection. The journalist Ballester Escalas recalls an anecdote about "the heated underground room, where the great scholar took refuge […] and where he had moved his books, microscopes, and test tubes." Aware of Cajal's unwillingness to give interviews, another journalist had posed as a student, knowing that Cajal would not turn him away. Cajal's maid Dora led him to the study. There was a misunderstanding: Cajal had understood that the purported student was going to give him an envelope (in Spanish, *sobre*), when he had actually mentioned his academic grade of "outstanding" (*sobresaliente*). After talking briefly, Cajal switched off the lights and the room was left in darkness: his wife's "tight-fistedness" forced him to save electricity.[27(p212)]

No women were allowed to enter his study, including Kety and Dora, but he made an exception for Dora's niece, "little" Hilaria, who was just 15 years old, and his daughter Fe. Hilaria was responsible for cleaning the "cave," which was generally littered with discarded papers.[10(p149)] Cajal had been working for two years on updating his "life's work," the three volumes of *Texture of the nervous system of man and the vertebrates*, and his friend Azoulay's French translation of the treatise (*Histologie du système nerveux de l'homme et des vertébrés*).[29,30] Years later, his daughter Fe recounted to García Durán Alonso the inexplicable occurrence: "Most of the notes were gone, and nobody could explain how it had happened."3(p81) Perhaps "little" Hilaria would have been surprised one day to have to sweep up a truly colossal pile of papers. One theory of what may have happened is that the inexperienced Hilaria, in her capacity as cleaner, may have thrown away the apparently discarded pages (*La Voz*, 18 October 1934). She had no way of knowing the consequences for Cajal of this mishap, which may even have accelerated his death. It has been described as "one of the greatest losses in the history of neurobiology."[17] It was not until 2013 that the treatise was republished by the Spanish National Research Council (CSIC, for its Spanish initials), missing, of course, the new details added by the author. In 1934, shortly before his death, Cajal wrote to José Ortega y Gasset: "I continue my work, but I now feel too keenly the weight of my 82 years and the fatigue of my memory; the personal tragedy that keeps me awake at night is the certainty that, due to my decline, it will be impossible for me to revise my work on the structure of the nervous system."[17]

Marcos Vallejo, the personal driver

On 19 August 1930, Cajal was interviewed by the journalist J. Díaz Morales for the magazine *Estampa, revista gráfica y literaria de la actualidad española y mundial* (1928-1938). The article was published with the title "El veraneo de Ramón y Cajal consiste en pasar una hora todas las tardes en un café" (Ramón y Cajal's summer holidays consist in spending an hour each afternoon in a café), and illustrated with an abundance of photographs by Benítez Casaux and Díaz Palomo.[12] The reporter bragged about how hard it had been to get the interview, given Cajal's reserved personality. The interview took place at Café La Elipa, at number 45, Calle Alcalá, where Cajal would spend an hour each afternoon. His personal driver, Marcos Vallejo, would pick him up punctually at 17:00 to drive him home "in that bourgeois monstrosity," as the *maestro* wrote. "I've changed café," said Cajal, "because nobody bothers me here." Indeed, he had stopped frequenting the Café del Prado, facing the Ateneo, thereby abandoning his afternoon gatherings, a tradition he had observed for years. Now, he would simply flick through the newspapers while he took his tea.

A photograph showed Marcos Vallejo, whom the reporter describes as "friendly and talkative," helping Cajal, aged 78 years, to exit the vehicle with visible difficulty. A footnote reads: "The years have not passed in vain for this glorious old man. He is shown here exiting his car during his daily outing, with the assistance of his chauffeur" (Figure 4). The article describes how Cajal usually gets out of bed at noon, and has an afternoon siesta, an indiscretion of Vallejo. Cajal responded laconically, almost in monosyllables: "His wife is very sick, which is why he doesn't go anywhere now, and he doesn't like going out with friends." He said no more.

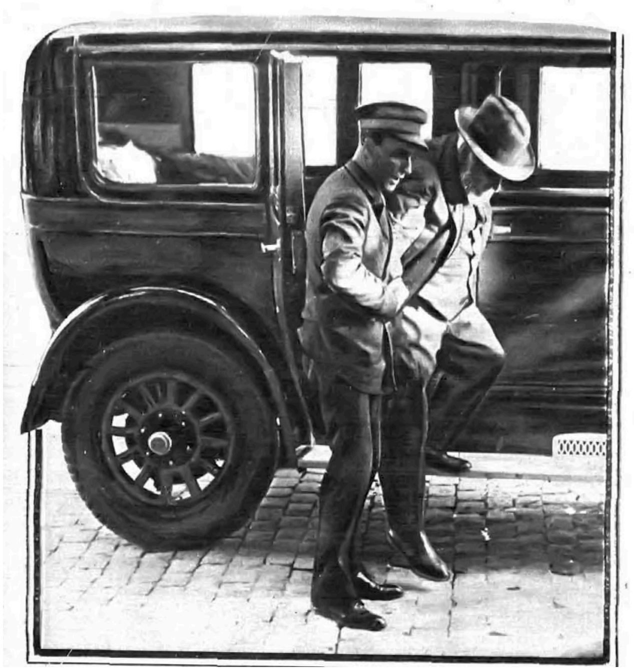

Figure 4. Marcos Vallejo Gordo of Madrid, aged 55, Cajal's personal driver from 1915. The photograph shows him helping Cajal exit a luxurious 1930s Buick, with some trouble (photograph by J. Díaz Morales, *Estampa*, 1930).

Tomás García de la Torre, the porter

When the journalist Luis Antonio del Olmet, accompanied by a photographer named Vandel, appeared at the Laboratorio de Investigaciones Biológicas with the intention of interviewing Cajal, he was told it would be impossible: "Don't go and waste Prof Cajal's time. He will be displeased to see you, most displeased, and you will have a horrible time," they were warned. They had not counted on Tomás García de la Torre, an "understanding and personable man" who was willing to achieve what Tello could not. Cajal agreed to respond in writing to a short questionnaire, with his son Jorge Ramón as the

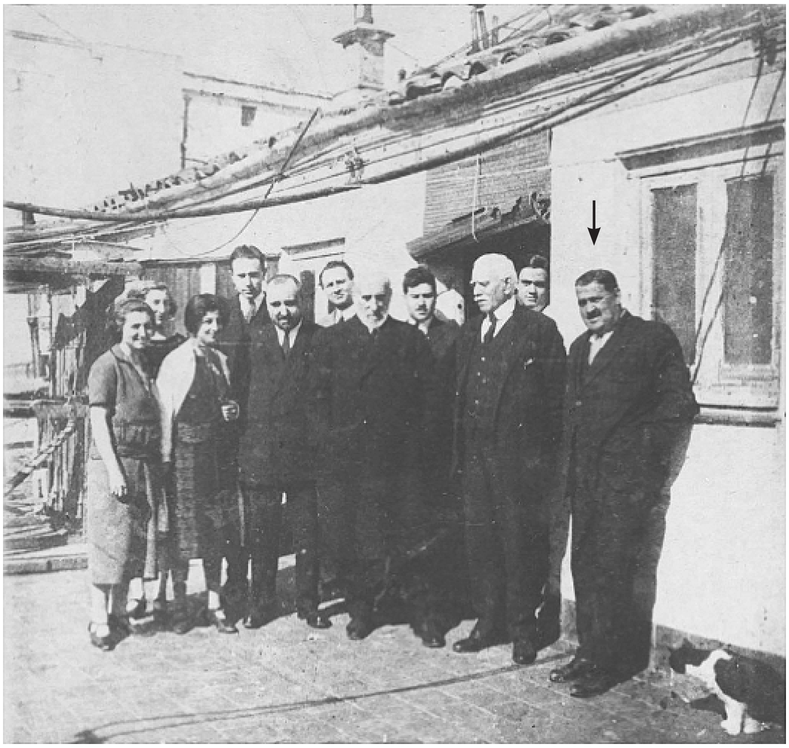

Figure 5. Photograph taken in the upper terrace of the old Velasco Museum. The woman at the centre-left is the laboratory assistant Carmen Serra. To the right, the other figures are F. de Castro, J.F. Tello, an unidentified person, S. Ramón y Cajal, R. Lorente de Nó, L. Calderón, and the porter Tomás García de la Torre (arrow). Original image from the Archivo Fernando de Castro (Censo Guía de Archivos de España e Iberoamérica, #ES.28079.AFC; Madrid, Spain), included since 2017 in the UNESCO Memory of the World Registry under the inscription "Archives of Santiago Ramón y Cajal and the Spanish Neurohistological School" (Collection ID: 2016-31).

mediator. They were even allowed to visit his home to speak with his wife Silveria, who explained his initial unwillingness due to "the stress that journalists usually subject him to."[12]

Tomás García de la Torre was crippled, or more precisely had lost a hand,[19] and had known Cajal for over 20 years.[12] In other words, they had met before 1901, when the laboratory moved to Dr Velasco's anthropological museum. It has been noted that he had been "very close with Cajal since the Cuban War of Independence."[5] The charming Tomás, from Alicante, may also have been his assistant, accompanying lieutenant Cajal in the campaign for the plains of Urgell.[1(p197)] Or indeed, they may have been comrades-in-arms in Vista Hermosa (Cuba), turning their Remingtons against the Mambí guerrillas,[1] or could simply have met when the physician-lieutenant administered quinine sulphate to the soldier Tomás to treat possible malaria.

Whatever the case, Tomás had made himself indispensable at the laboratory, even more so than the assistant Manolo or the caretaker Remartínez. He was known as the "despicable porter," with his untouchable prerogatives, of which Cajal preferred to remain ignorant; he was "thuggish with his subordinates, and told frequently erotic anecdotes; he was a scoundrel."[16] Photographs show him posing arrogantly, leaning against the wall alongside Cajal and his students on the terrace of the Velasco museum (Figure 5), or following the master's lessons as though he was just another researcher (Figure 6). However, the servile Tomás was also Cajal's "errand boy": his master would send him to fetch water for his preparations from the La Fuentecilla spring ("the best in Madrid," according to a popular song; Figure 7), write to him from Cercedilla to order that the driver wait for him at the station (CSIC, 7422), or order him to make preparations for his master's arrival (CSIC, 7452-02).[17] Tomás

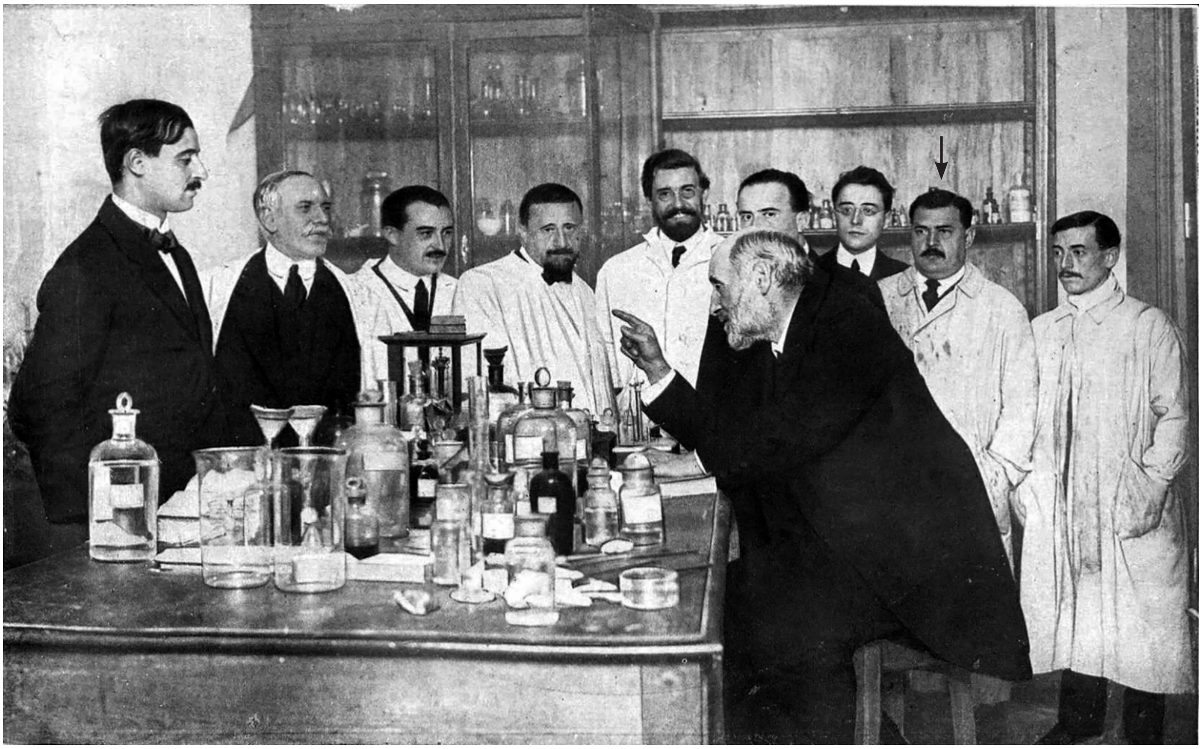

Figure 6. Cajal in the laboratory: from left to right, Gonzalo Rodríguez Lafora, Domingo Sánchez Sánchez, José Miguel Sacristán, Miguel Gayarre Espinal, Nicolás Achúcarro, Luis Rodríguez Illera, and Juan de Dios Sacristán. Also shown are Tomás García de la Torre (arrow) and the autopsy assistant Jerónimo (*La Esfera*, 1915; no. 56, 24 January).

even witnessed the will that Cajal dictated in 1931, bequeathing the Las Peñicas estate (Alcantarilla, Murcia) to his daughter Felina.[31]

However, the true relevance of Tomás García de la Torre in the history of human misery was his role in "the conflict" (César Aguirre de Viani, a student of Fernando de Castro, referred to it as "the intrigue").[3] Much has been written on the subject, and this is not the place to discuss the details; in short, the rupture between Cajal and Del Río-Hortega forced the latter to leave the laboratory at the Residencia de Estudiantes in 1920; the centre had not had a director since the death of Nicolás Achúcarro two years prior.[16,18,19] It is worth noting here the words of Pío del Río-Hortega, the great victim of the situation, regarding the porter:

> Tomás was a mature man, cocky and rude, boorish and malicious, who served as Cajal's scribe at his home and in the laboratory. A great dog who would growl, bare his teeth, or bite anyone other than his owner, or at least who did not belong to the house, but submitted and obeyed the voice of his master or those bearing gifts, which he would only accept indirectly, holding out his only hand. He would constantly separate roles: "Ours, … yours…." The laboratory was his realm, and he came and went like a lord; wearing a hat in the winter and in his shirtsleeves in summer; whistling and humming with no concern about disturbing us with his impolite noises, which Don Santiago, increasingly deaf, did not hear. Most of the instrumentation was considered to be communal, but this was not the case with consumable goods, which were stored separately. If we wanted to use something that we had not purchased ourselves, the porter would intervene, letting us know that it was "the property of the laboratory." For Tomás, we were no more than tiresome guests disturbing the peace that would have reigned if only

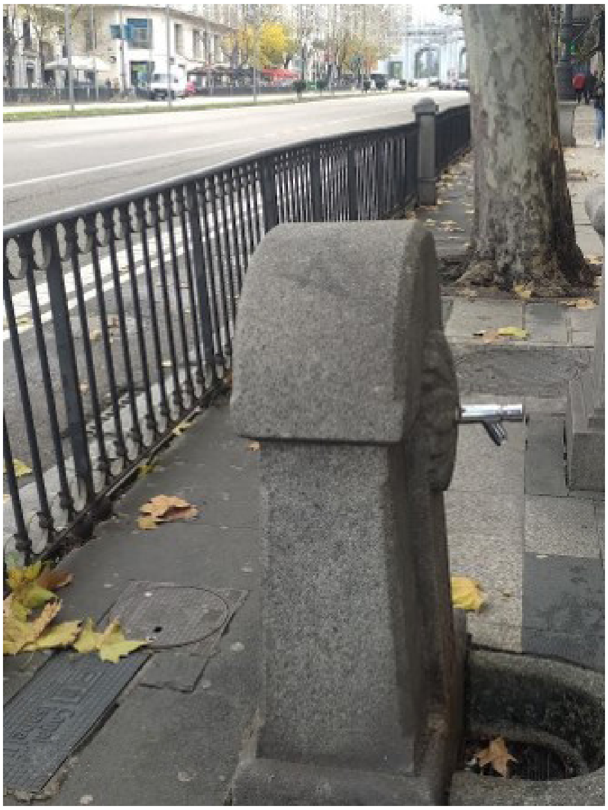

Figure 7. The La Fuentecilla spring on Calle Alcalá, whose famously pure water Tomás would collect for Cajal's histological preparations (photograph by the author).

> Don Santiago and Domingo Sánchez had been given the run of the laboratory. This is why he slyly waged war against us; whether he followed his own whims or the perverse urgings of others, I could not say.[19]

Tomás, the porter, evidently abused Cajal's trust in him. "The master would sometimes knock him down a peg or two, but would go no further," said Kety Lewy.[10] He died shortly before his employer. Before the staff of the laboratory went to Tomas' funeral, Cajal sardonically told them: "Well, you may go, but on one condition: you must leave him there forever."[10(p139)]

Vargas, "el ranero"

A gypsy with a thick, black moustache, Vargas was responsible for supplying small research animals. "Laboratory animals were supplied by an old drunk whom we called *el ranero* [the frog man]. He brought cats and pregnant rabbits that he stole from farmyards," recalled Enriqueta Lewy in her old age (*El País*, 9 April 1996). In addition to procuring stray cats and dogs, he set up a small colony of mice and guinea pigs in the courtyard of his house, a bountiful industry that helped him raise his numerous children. He introduced himself with business cards reading "Vargas, purveyor of laboratory animals and critters." Vargas, "*el ranero*," brought a touch of colour to the austere, solemn environment of the laboratory, and Cajal enjoyed conversing with him with his well-known straightforwardness.[27] Some time later, he continued supplying his wares to the laboratory of Fundación Jiménez Díaz.[32(p302)]

Enriqueta Lewy Rodríguez (1910-1996), the librarian, secretary, and translator

Sigfrido Lewy Herzberg, a Jew born in Poland, was known in pre-war Madrid as "Federico." He married Carmen Rodríguez Núñez, of Valladolid, and the couple had three daughters, Carmen, Irene, and Enriqueta; the latter was born in 1910, on Calle Fuencarral. They received an excellent education at the German School of Madrid. Sigfrido's wife, aged 33 years, was left in a precarious economic situation after his death, and the family moved to Calle Trafalgar and opened a guesthouse. There, Irene entered a relationship with a guest 15 years her senior, the journalist César Falcón, who had recently been expelled from Peru as an organiser of the local socialist party.[a] This may have been the catalyst for the two younger sisters becoming dedicated members of the Spanish Communist Party (PCE); Carmen, who was apolitical, was imprisoned in the post-war period due to her association with her sisters (www.ferrand.es).

The principal of the German School was aware of the Lewy family's economic difficulties, and knew that Cajal was interested in finding somebody to translate German-language scientific articles. Irene, aged 15 at the time, began working for the histologist in 1922 for a monthly salary of 166 pesetas and 66 cents; she left for London three years later with the journalist Falcón. It was thus that Kety joined the Laboratorio de Investigaciones

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[a] The life of Irene Carlota Berta (1907-1999), better known as Irene Falcón, is described in her book *Asalto a los cielos. Mi vida junto a Pasionaria*, which recounts her work as secretary to the Communist leader Dolores Ibárruri. The book describes significant events in the history of Spain. It is currently out of print, but can be found in second-hand bookshops.

Biológicas, in 1925. She typed Cajal's abundant correspondence,[10(p88)] translated some German articles, and above all organised the well-supplied library.

Near the end of the Civil War, Enriqueta was evacuated from El Hondón, an airport in Monóvar (Alicante), travelling to France in a Republican aircraft. She was one of the privileged few who were able to escape via the aerodrome, alongside other distinguished PCE members including Juan Negrín, Dolores Ibárruri, Rafael Alberti, and Enrique Lister. Accused of being a "Stalinist agent," she was deported from France to Russia. She ran the radio station Radio España Independiente ("La Pirenaica"), which broadcast anti-Franco propaganda from Moscow from 1941 (Figure 8). However, this was not her final destination, and she ended up in China after one of Stalin's purges. She returned to Spain in 1971, after 31 years in exile (www.ferrand.es).

By the time she published her book *Así era Cajal* (Cajal, the man), Enriqueta was 67 years old. She was working at the CSIC as a documentalist, supposedly because Cajal had designated her an "intern," with a view to later making her a full employee. In fact, she had been rejected by the JAE due to her "rudimentary knowledge," in her own words.[10(p31)] In her book, recollection is interspersed with opinion. For instance, she recalls Cajal celebrating birthdays with his team: "The men drank cognac and the women Marie Brizard: a little glass doesn't hurt. We also ate custard puddings from a patisserie on Calle del Pozo." These comments might be considered irrelevant, were it not for the fact that they demonstrate her status as a member of the Cajal school.

In this first book from 1977, she abusively intrudes on the family's personal life. For instance, she comments on their financial troubles ("on some occasions they even had to do without their maid"),[10(p36)] and impertinently labels Cajal "a man of rude manners" after a visit to London on Sherrington's invitation: "Because he aired his sheets by hanging them from his windows, a policeman approached to ask about the meaning of those white banners. People were surprised to find him haggling in the city's elegant stores."[10(p55)] However, she goes furthest when, not without a degree of frivolity and aplomb, she asserts that Cajal "had clear signs of premature ageing." She even comments that "photographs from the time show the effigy of an old man who should be retired from all intellectual effort." This is followed by an uncritical account of Achúcarro's misdiagnosis of "cerebral

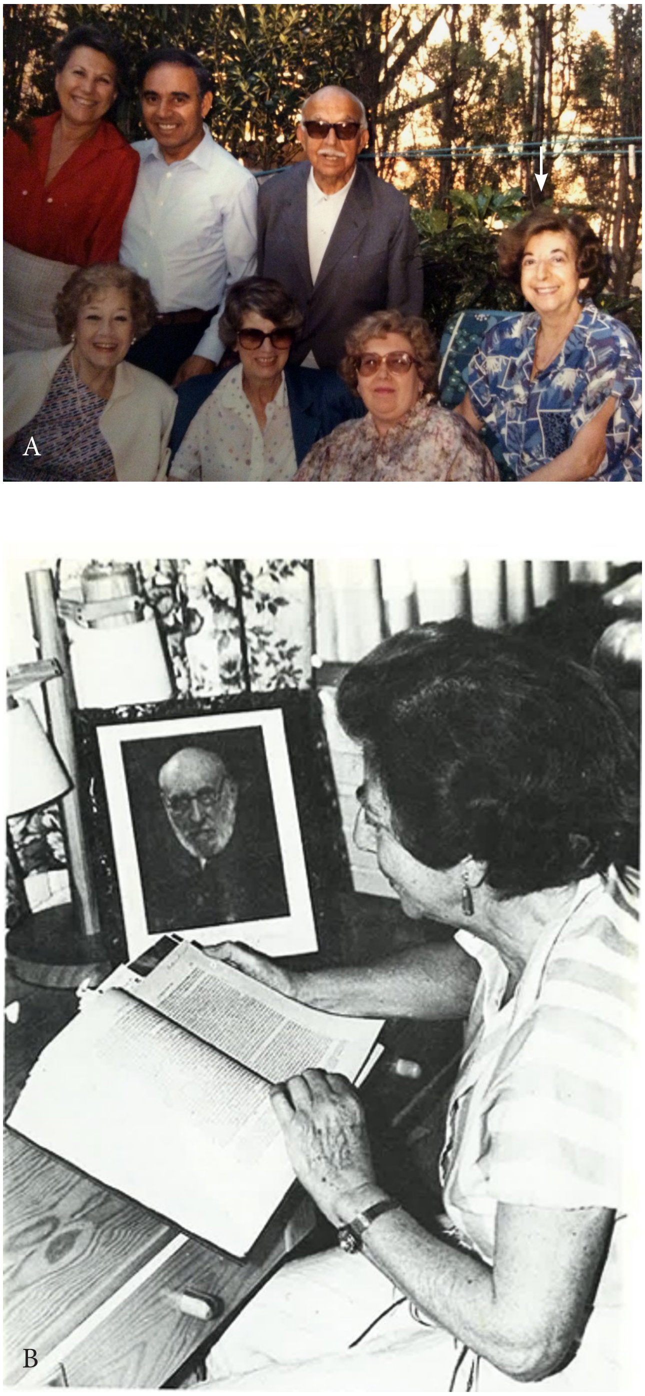

Figure 8. A) A family photograph showing Enriqueta Lewy (arrow) during her time in the USSR, shortly before returning to Spain in 1971 (photograph taken from the blog of Sánchez de Nieva Navas, 2017). B) Enriqueta Lewy posing for *Tribuna Médica* (1986), a weekly magazine distributed to physicians, pretending to read Cajal's *Recollections* in front of a photograph of the *maestro*. The caption (1987) reproduced the supposed dedication: "To Ketty [sic], with great affection, your boss and *colleague* S. Ramón y Cajal" (emphasis added). It was not possible to document this dedication.

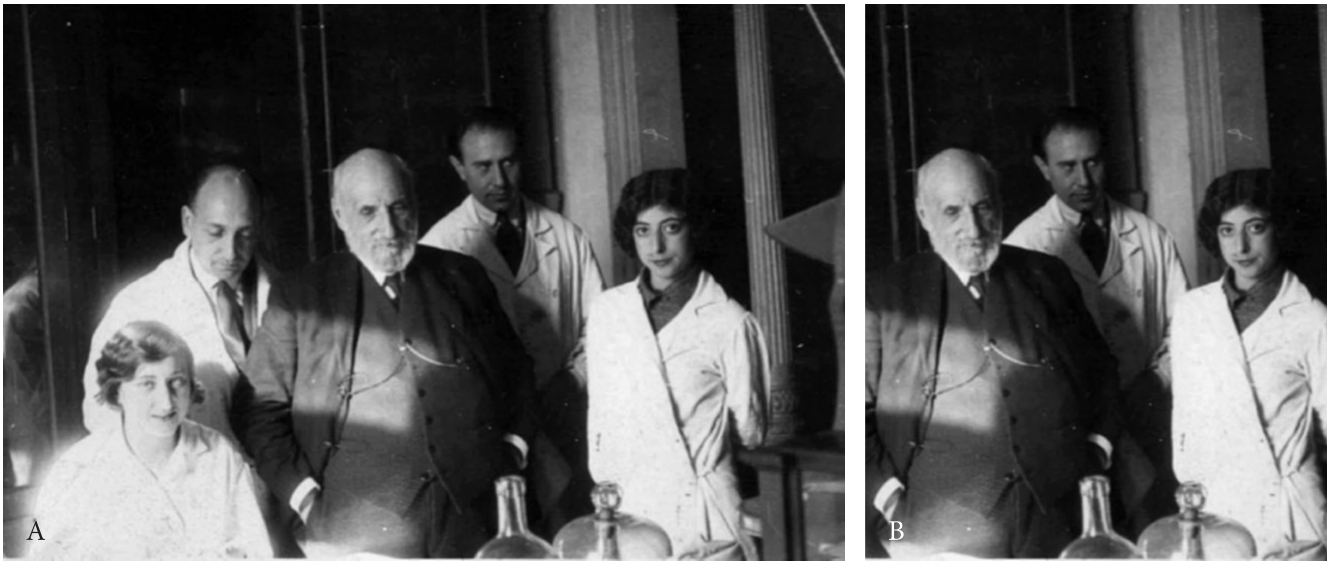

Figure 9. A) From left to right: the laboratory technician Carmen Serra, José María Villaverde, Ramón y Cajal, Fernando de Castro, and the secretary Enriqueta Lewy. Original image from the Archivo Fernando de Castro (Censo Guía de Archivos de España e Iberoamérica, #ES.28079.AFC; Madrid, Spain), included since 2017 in the UNESCO Memory of the World Registry under the inscription "Archives of Santiago Ramón y Cajal and the Spanish Neurohistological School" (Collection ID: 2016-31). B) The doctored image published by Enriqueta Lewy in her 1987 book (p. 92); the part of the photograph showing Carmen Serra and Dr Villaverde has been amputated.

arteriosclerosis" and the erroneous concept from the time that "intellectual effort is harmful to the nervous system."[10(p99)]

Ten years later, in 1987, she published another work on Cajal, which largely copies his non-histological works. In biased terms, she extracts Cajal's alleged political thought in accordance with her own Communist ideology, "scrutinising [she says] the social ideas of the *maestro*"[11(p21)] and defining him as "a scientific proletarian in his unchanging social position."[11(p42)] She inaccurately suggests that he could not be buried in the civil cemetery, "alongside other distinguished thinkers, due to a lack of space," and asserts that though he was finally buried at the La Almudena cemetery, with his wife, the tomb was free from "any official or religious symbols."[11(p44)] She had evidently never visited the site, which lies in the shade of an enormous cross and an old cypress.

"El lápiz" (the pencil), a three-metre statue of Cajal, which now stands at the entrance to the Cajal Hall of the College of Physicians of Madrid, displays damage inflicted during the bombing of the Faculty of Medicine during the Spanish Civil War.[29] Enriqueta Lewy attended the inauguration of the statue, a month after the proclamation of the Second Spanish Republic (*El Sol*, 21 May 1931). The statue was erected after a petition from his students, and the ceremony was funded by the Federación Universitaria Escolar (FUE; University Students' Federation), a Marxist organisation.[33] Always careful not to leave any clues, Lewy changed the meaning of the initials in her book for a more palatable one: "Federal Union of Hispanic Students."[11(p14)]

Discussion

Known for his straightforward manner, Cajal always had cordial relations with his employees, whether at his new home on Calle Alfonso XII or in the confines of the laboratory at the National Museum of Anthropology. The faithful Isidora Ballano ("Dora") lived at the family house and was responsible for his personal care, even in his dying moments. Such was her dedication that Cajal bequeathed her 2500 pesetas in his third will, although he also required that she not marry, a condition that would today be considered a misogynistic abuse. A new version of the will, drafted in 1931, required that "she continue providing her services and care until my death."[25,31]

"His final days were marked by bitterness," wrote Cajal's student César Juarros.[15(p139)] He was tortured by headache and insomnia, and the "deep depression caused by the conflict of 1914, where those model European nations brutally annihilated one another." On a diet of kefir and Bulgarian yoghurt, he hoped his intractable diarrhoea could be controlled.

It is a fairly frequent occurrence for overzealous journalists seeking information on famous individuals' lives to exploit those in their employ. Such was the case with Cajal's driver Marcos, who indiscreetly let slip that Don Santiago only got out of bed at noon. The refractory insomnia that soured his latter years, and the increasing doses of barbital that he took throughout the night, are well known, and may explain his headaches and the aggravation of the mood disorder he suffered in his final days.[26]

A resource for surviving in the poverty of post-war Madrid was the supply of animals to research laboratories. This was the case of Vargas, "*el ranero*," a vermin catcher who charged his daughters with keeping new litters of mice alive using their body heat. His figure is reminiscent of the character "Muecas" in *Time of silence* by the psychiatrist Luis Martín Santos, considered one of the greatest 20th-century Spanish novels.[34] In the novel, the MNA mouse strain, which developed malignant tumours, had been imported from Illinois (USA) at prohibitive expense. In the cold of the slums, Muecas' daughters kept the precious creatures beside their breasts to keep them warm enough to live. The author and psychiatrist had probably heard of the eccentric Vargas during his time working at Hospital Provincial de Madrid. In fact, he had himself published experiments with mice years prior.[35]

The atmosphere at the laboratory was tense, and the guiltiest party was Tomás García de la Torre, the porter. "The direct students of Cajal and Tello considered Don Pío an outsider."[3(p140)] Obsequious with his master, Tomás was impertinent, rude, and arrogant with the many disciples of Del Río Hortega (Isaac Costero, Jiménez de Asúa, Collado, Gallego, Sánchez Lucas, Vara López, Llombart, Pérez Lista, and Ortiz Picón). He was fiercely protective of the material he considered "ours" and disrespectful of that he considered "theirs." He would strut around the laboratory as though it belonged to him, latching onto the researchers to hear the *maestro*'s explanations as though he were one of them, or simply posing on the museum terrace in a photograph recording the moment. It is inconceivable that Cajal would have been unaware

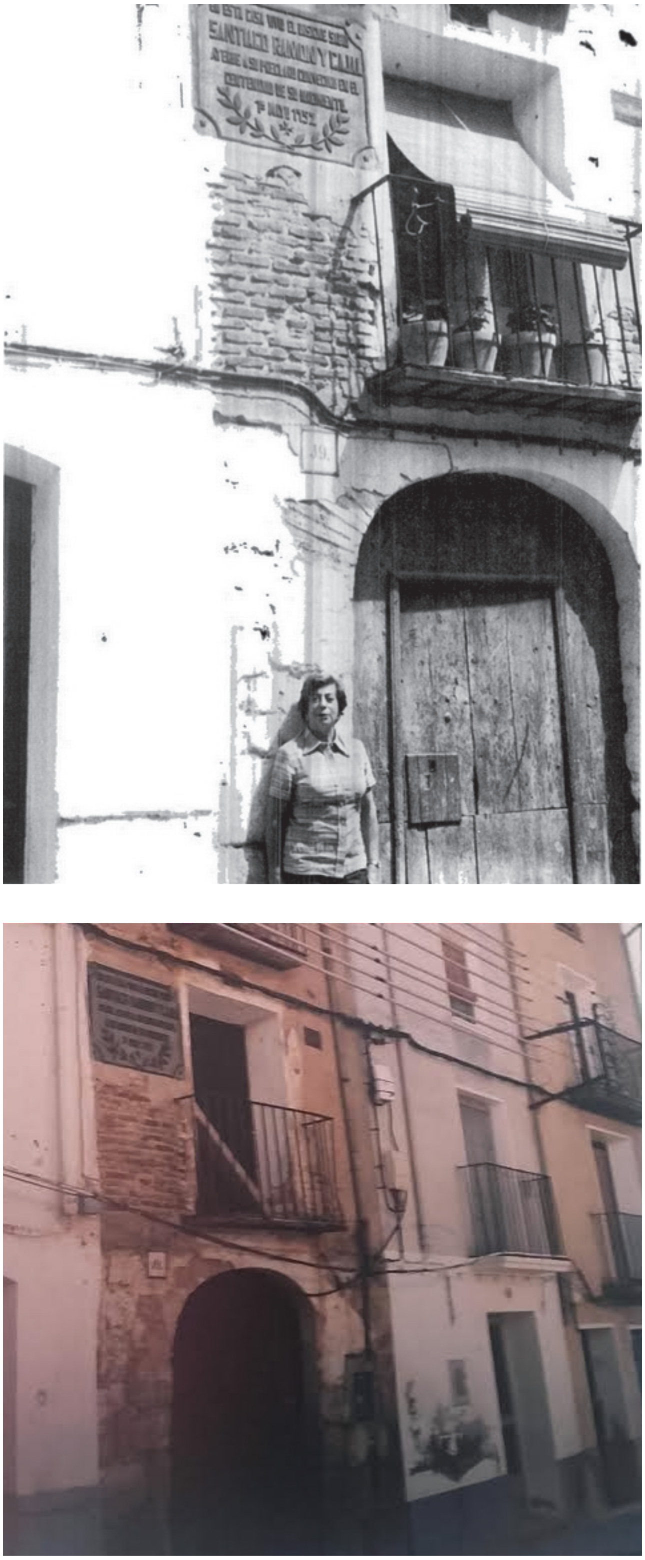

Figure 10. Above: Enriqueta Lewy posing in front of the Cajal family house in Ayerbe, where Santiago Ramón y Cajal spent his early years (1987; p. 164). Below: the dilapidated state of the building on 17 June 2018 (photograph by the author).

of the tensions and disagreements in this uncomfortable setting, even in spite of his hearing loss, and he must have permitted the excesses of his old comrade-in-arms. The rupture between Del Río Hortega and Cajal eventually came to a head, and unkind words were exchanged.[16] Several versions of the ultimate causes of the disagreement have been published,[20] but are beyond the scope of this article. In any case, Don Pío was forced to leave for the "Residencia del Pinar," which had lacked a director since the death of Nicolás Achúcarro in 1918, and where students with grants from the JAE undertook training; in practice, it was an extension of Cajal's laboratory.[36] The two men reconciled after a long conversation under the high ceilings of the Café La Elipa, near the church of San José. In exile, Don Pío continued considering himself a disciple and admirer of Cajal.[37]

As a young physician, it was an irresistible temptation when, in the bookshop La Casa del Libro, at number 29, Gran Vía (Madrid), I came upon a small volume entitled *Así era Cajal*. As students, my cohort (1959-1965) only learned of Cajal in the classes of Fernando de Castro, professor of histology, and because we used a more recent version of Cajal's *Manual de histología normal y técnica micrográfica* (Manual of normal histology and micrographic technique), which was procured from an improvised shop set up by the SEU, a Falangist students' union. The subject was considered one of the toughest in the medical degree, and Don Fernando was known as one of the best professors.[38] We were not aware at the time of the Franco regime's intense efforts to destroy the work of Cajal and his school[31]; this is only one example of the purging of 140 physicians from the Faculty of Medicine of Madrid.[6]

Questions have been raised in recent years about this work by the "influential librarian," a "copy and paste" of Cajal's work, which is hagiographic as regards herself and, surprisingly, overlooks the not-insignificant number of women who worked at the laboratory,[5] either as illustrators, laboratory staff, or even original researchers, as was the case of Manuela Serra.[9] In 1971, amnesty had been granted to numerous prisoners, including political prisoners, which the old PCE activist presumably took as encouragement to return to Spain. By the time she published her first book, in 1977, the party had been legalised on "glorious Saturday," but she remained cautious due to the old regime's relations with Hitler. Prudently, she published the book in the name "Enriqueta L. Rodríguez"; in other words, she used only her mother's surname.[10]

A decade later, Lewy dared write a second book,[11] reproducing various of Cajal's writings word-for-word. This second work was different than the first: cherry-picking certain phrases out of context, she insinuates that Cajal's political thought might not have been far removed from her own (Sánchez de Nieva, blog post published 17 July 2017). At the scientific documentation department of CSIC, she continued publishing occasional monothematic articles, such as "El Madrid de Cajal" (Cajal's Madrid)[33] and another similar text in the journal *Arbor*.[39]

It is clear from reading these articles that she repeatedly inserts falsehoods, such as her changing the name of the student organisation FUE out of convenience.[33] Perhaps the most egregious example is her manipulation of the photograph in which she originally appeared alongside Cajal, Fernando de Castro, Carmen Serra, and José María Villaverde Larraz, who disappeared in Madrid (no body was ever found) during the Civil War (Figure 9). The original photograph appears as Fig. 3 in the study by Giné et al.[5]; on page 92 of Lewy's 1987 book,[11] the left part is amputated, obscuring the presence of the other woman at the laboratory. It is also unusual for the author of an essay to include up to three photographs of themselves. For instance, in a photograph of the family home of Cajal's father Dr Justo Ramón Casasús, in Ayerbe (Huesca), she posed in front of the building (Figure 10). Another equally significant image was printed in an interview with Lewy for the magazine *Tribuna Médica*, popular among physicians at the time, in which a scene was set up with Lewy affecting concentration, reading a copy of Cajal's *Recollections of my life* in front of a large photograph of the *maestro* (Figure 8B).

As the saying goes, "no book is so bad that some good could not be got out of it." And Enriqueta Lewy had her merits: she raised awareness among the general public, in an accessible format and language, about both scientific and personal facets of Cajal, who was practically unknown outside of scientific circles. Thus, people began speaking freely of this exceptional Spaniard.

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Conflicts of interest

The author has no conflicts of interest to declare.

References

1. Ramón y Cajal S. Recuerdos de mi vida. In: Fernández Santarén J, ed. Clásicos de la Ciencia y Tecnología. 4th ed. Barcelona: Editorial Crítica, S.L; 2015. [Ramón y Cajal S. Recollections of my life. Horne Craigie E, tr. Cambridge (MA): The MIT Press; 1996].
2. López Piñero JM. Ramón y Cajal. Barcelona: Salvat Editores, S.A.; 1995.
3. Aguirre de Viani C. Cajal y su escuela. Estudios de historia de la ciencia y técnica. Salamanca (ES): Junta de Castilla y León, Consejería de Educación y Cultura; 2002.
4. De Castro F. Cajal y la escuela neurológica española. Madrid: Universidad Complutense de Madrid; 2019.
5. Giné E, Martínez C, Sanz C, Nombela C, de Castro F. The women neuroscientists in the Cajal School. Front Neuroanat. 2019;13:72.
6. Otero Carvajal LE. La destrucción de la ciencia en España. Las consecuencias del triunfo militar de la España franquista. Hist Comun Soc. 2001;6:149-86.
7. De Carlos JA, Pedraza M. Santiago Ramón y Cajal: the Cajal Institute and the Spanish Histological School. Anat Rec. 2014;297:1785-802.
8. Giménez-Roldán S. Demolición del palacete Ramón y Cajal y los últimos años del premio Nobel: la historia dilapidada. Neurosci Hist. 2018;6:10-20.
9. Nombela C, Giné E, de Castro F. Manuela Serra en la Escuela de Cajal, entre técnico de laboratorio y neurocientífica. Neurosci Hist. 2020;8:39-48.
10. Rodríguez EL. Así era Cajal. Madrid: Espasa Libros; 1977.
11. Lewy Rodríguez E. Santiago Ramón y Cajal. El hombre, el sabio y el pensador. Madrid: Consejo Superior de Investigaciones Científicas. Extensión Científica y Acción Cultural; 1987.
12. Antón del Olmet L, De Torres Bernal J. Cajal. Historia íntima y resumen científico del español más ilustre de su época. Madrid: Imprenta de Juan Pueyo; 1918.
13. Díaz Morales J. El veraneo de la gente conocida. El veraneo de Ramón y Cajal consiste en pasar una hora todas las tardes en un café. Estampa, revista gráfica y literaria de la actualidad española y mundial. 1930;136:9-11.
14. Masip y Valls F. El doctor Ramón y Cajal. La Esfera. 1915;56:3.
15. Juarros C. Ramón y Cajal: vida y milagros de un sabio. Madrid: Ediciones Nuestra Raza; 1935.
16. Rodríguez Lafora G. Disgustos, peripecias y desengaños de Del Río Hortega. Rev Esp Oncol. 1965;12:45-50.
17. Fernández Santarén J. Recuerdos de mi vida. Madrid: Editorial España; 2014.
18. Ortiz Picón JM. Disidencia de Cajal con Río-Hortega a propósito del tercer elemento de los centros nerviosos. In: Cinco ensayos históricos sobre biología. Madrid: Editorial Garsi; 1988. p. 50.
19. Del Río-Hortega J. The discoveries of microglia and oligodendroglía: Pío Del Río-Hortega and his relationships with Achúcarro and Cajal (1914-1934). Neurosci Hist. 2013;1:176-90.
20. Riera Palmero J, Del Río-Hortega J. Pío Del Río-Hortega y la institucionalización de la ciencia española. In: Español González L, Escribano JJ, Martínez García MA, coord. Actas del VIII Congreso de las Sociedad Española de la Historia de las Ciencias y de la Técnica. Ene 2004. Universidad de Valladolid. Logroño (ES): Universidad de la Rioja; 2004. p. 161-200.
21. Fernández Santarén JA. Santiago Ramón y Cajal: Epistolario. Madrid: La Esfera de los Libros; 2014.
22. Carro S. Cajal, enfermo. Gaceta Médica Española. 1934;18:137-8.
23. Mariño C. Los últimos testigos de la vida de Ramón y Cajal [Internet]. El País. 17 Oct 1984 [cited 1 Aug 2023]. Available from: https://elpais.com/diario/1984/10/17/sociedad/466815602_850215.htm.
24. Somolinos D'Ardois G. Homenaje a Cajal en el primer centenario de su nacimiento. Mexico City: Editorial Cultura; 1952. Cajal a los ochenta años; p. 67-73.
25. Durán Muñoz G, Alonso Burón F. Cajal, vida y obra. Tomo I. Madrid: Editorial Científico-Médica; 1983.
26. Giménez Roldán S. Cajal's unbearable cephalalgias: the consequences of a misdiagnosis. Rev Neurol (Paris). 2016;172:680-88.
27. Laín Entralgo P, Albarracín A. Santiago Ramón y Cajal o la pasión de España. Barcelona: Editorial Labor; 1978.
28. Alonso JR, De Carlos JA. Cajal. Un grito por la ciencia. Pamplona (ES): Next Door Publishers; 2018.
29. Ramón y Cajal S. Textura del sistema nervioso del hombre y de los vertebrados (tres volúmenes). Madrid: Imprenta y Librería de Nicolás Moya; 1899-1904.
30. Ramón y Cajal S. Histologie du système nerveux de l'homme et des vertébrés, traduite de l'espagnol par le Dr. L. Azoulay. 2 vol. Paris: A. Maloine Éditeur; 1909, 1911.
31. Viudas Camarasa A. Los testamentos del Nobel Santiago Ramón y Cajal y Silveria Fañanás García. Boletín de la Real Academia de Extremadura de las Letras y las Artes. 2018;26:135-94.
32. Jiménez Casado M. Doctor Jiménez Díaz. Vida y obra. Madrid: Fundación Conchita de Rábago de Jiménez Díaz; 1993.
33. Lewy Rodríguez E. El Madrid de Cajal. Madrid: Ayuntamiento, Delegación de Cultura, Instituto de Estudios Madrileños; 1985.
34. Martín-Santos, R. Luis Martín-Santos and his contribution to psychiatry. Hist Psychiatr. 1995;6:253-63.
35. Martín-Santos L. Vaguectomía experimental y el test de la ligadura del píloro en la rata. Arch Med Exper. 1948;11:127-44.
36. Vera Sempere F. La producción científica de Pío del Río Hortega (1882-1945) y el laboratorio de la Residencia de Estudiantes. Neurosci Hist. 2022;10:126-44.
37. Del Río Hortega P, Estable C. Ramón y Cajal. Homenaje en el décimo aniversario de su muerte. Montevideo: Institución Cultural del Uruguay; 1944.
38. González Calvo M. Trío de ases: Oliveros, Castro y Jiménez Díaz. In: Gómez Recio R, Giménez Roldán S, eds. Medio siglo de medicina española. Memorias de la promoción 1958/59-1965. Santander (ES): Ediciones Tantín; 2017. p. 54-64.
39. Lewy Rodríguez E. Santiago Ramón y Cajal "Praeceptor Mundi". Arbor. 1998;161:141-50.