

Bourneville: a neurologist in action

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ABSTRACT

Bourneville is known for having provided both clinical evidence and pathology findings of the first case of tuberous sclerosis complex, also known as Bourneville disease. While his fame is a fitting reward for his labours as a neurologist and neuropathologist devoted to mental deficiency and epilepsy research, it is unfortunate that his tremendous political and social contributions have been forgotten. Bourneville lived through the tumultuous years marked by the Franco-Prussian War and the Paris Commune. The decline of the Second French Empire and the birth of its Third Republic provided opportunities by which young progressives, many of whom were doctors, could enter politics. Bourneville, positioned on the extreme left, set his sights on a long list of reforms in the teaching and practice of both medicine and nursing, and on improving hygiene and public health. He consistently made major contributions as a journalist and editor, and this activity helped him advance his medical and political ideas alike. His greatest personal crusade was transforming the appalling children's ward in the Bicêtre into a department governed by a unique and groundbreaking medical and pedagogical model. The same idea would also be promoted at the Fondation Vallée for girls. Unfortunately, those outstanding projects were abandoned after Bourneville's death, and they would not be resumed for several decades.

KEYWORDS

Asylums, Bourneville, Fondation Vallée, paediatric care, social reform

Introduction

Describing Bourneville as a “neurologist in action” is an attempt to summarise the astonishing track record of a doctor initially shaped by the alienist tradition and the nascent neurology of his time. However, his editorial, political, and social activities exceeded the scopes of those two specialties, either of which would have been sufficient to constitute his life's work. This article presents Bourneville's biography, ideology, and personality viewed in the context of the turbulent political times in which he lived; his works as an editor and writer; and his political, medical, and pedagogical practices. Special emphasis will be placed on his achievements as a reformer, as this facet of his career is the least well-known by neurologists.

Material and methods

Bourneville's life and achievements have already been described in one lengthy biography¹ and several shorter ar-

ticles or summaries,²⁻⁶ some of which specifically address his work with mentally handicapped children.^{7,8} All sources cited from *Le Progrès Médical* or from *Archives de Neurologie* are available online.^{9,10} Bourneville's clinical studies and his political or social reports and essays can also be viewed online.^{11,12}

We will also briefly mention the eponym for tuberous sclerosis –Bourneville disease– a term still used today and which will provide material for a future article.

Results

Biographical timeline

Bourneville was born in Garencières, Normandy, in 1840. According to the French National Assembly database, he had four given names: Nicolas and Charles, which have been forgotten, as well as two more grandiose names, Désiré and Magloire. It would seem that he preferred none of them, given that the vast majority of his writings

were simply signed 'Bourneville'. His early years were spent in a modest family dedicated to the production of *poudrette*, a fertiliser obtained as a by-product of latrine waste. His decision to attend medical school in Paris in 1859 was influenced by Louis Delasiauve: doctor, alienist, fellow Norman, and a friend of the family's.

After completing his basic studies of medicine in 1865, Bourneville began work as an intern in various services, including Charcot's in 1868. His intern years were captured in a photo that shows him in a somewhat Napoleonic attitude (Figure 1). Other engravings or photos show only his bust and portray a robust and forceful



Figure 1. Photograph from Album de l'internat de La Salpêtrière with Bourneville in the centre, conserved in the Charcot Library at Hôpital de la Salpêtrière (Université Pierre et Marie Curie, Paris)

personality (Figure 2), contrasting with the short stature we observe in the earlier photo. I should also remark that Léon Daudet called him *le petit Bourneville*, and overcome by his contempt and dislike for his rival, described him as "as big as a boot". In one anonymous caricature (Figure 3) Bourneville appears as a tiny figure clutching his famous thermometer in the company of Charcot and a group of other students doing rounds.

In this moment in his intern years, between 1865 and 1866, terrible cholera epidemics were sweeping Amiens and Paris. Bourneville made a name for himself by caring for the residents of Amiens, and that town rewarded him with a medal and the title of honorary citizen.

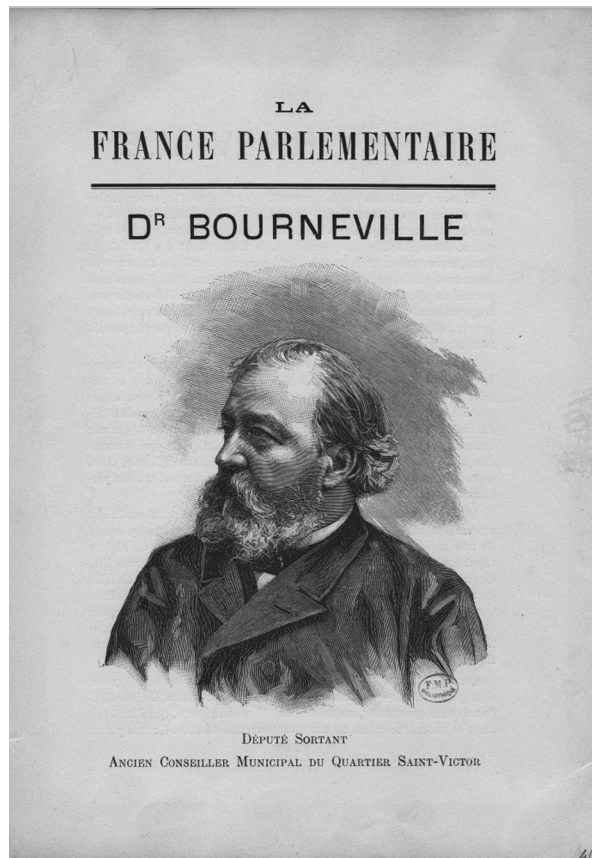


Figure 2. Engraving of Bourneville

When the Franco-Prussian war broke out in 1870, Bourneville was assigned to the 160th battalion of the National Guard as its surgeon, and to the ambulance



Figure 3. Anonymous caricature of Charcot and his students doing rounds. Bourneville is portrayed as a very short figure brandishing his famous thermometer.

station set up in Jardin des Plantes. One of his tasks was evacuating the patients from Hôpital de la Pitié, which was under enemy fire. The experience left Bourneville profoundly distrustful of all things Prussian. According to Noir, his student,² he was not even willing to greet German professors when they visited his famous department at the Bicêtre.

The war ended in crushing defeat for the French as the Prussian army marched into Paris and the government retreated to Versailles. The power vacuum in Paris was then filled by a revolutionary movement that did not accept defeat. This attempt only lasted from March to May 1871, before General Thiers quashed the Commune in a bloody show of fire-power. We know that in those dark days, Bourneville was personally responsible for saving many people, including some of his political opponents, by insisting on the hospital's role as a humanitarian sanctuary.

After interning with Charcot in 1868, he rejoined his beloved master Delasiauve. In 1870, he presented a thesis on his favourite subject: *Etudes de thermométrie clinique dans l'hémorragie cérébrale et dans quelques autres maladies de l'encéphale*.

At that time, patients at La Salpêtrière were divided into two groups for administrative reasons. The first consisted of the *aliénées* (insane), and the hysterical and epileptic women, all of whom were cared for by alienists. The other, far larger group was made up of elderly *pensionnées*. That latter population was served by two medical departments, one led by Charcot, and the other by Vulpian. The St Laure building, which housed some 150 hysterical and epileptic women, was on the point of collapse, and the administration opted to assign them to the care of Charcot's department. Bourneville, who had finished his internship, was transferred along with these patients, and the two doctors experienced a decisive moment in their relationship. Although Bourneville was listed as a doctor at Hospice de Bicêtre as of 1871, he maintained such close unofficial ties to Charcot at La Salpêtrière that his enemies called him 'Charcot's Mameluke'. This decade saw a huge increase in staff numbers at La Salpêtrière.

Bourneville's career began to take shape when he was appointed the head of the boys' ward at Bicêtre in 1879. Although he covered for his old teacher Delasiauve at La Salpêtrière in 1880, he would remain at Hospice

Bicêtre until his retirement in 1905. During those years, he completely reworked the care programme for disabled children. His reforms in the areas of medicine and teaching were also implemented at Fondation Val-lée, whose activities he described at length.

His career as a politician was more noteworthy than that as a doctor, although the two were closely linked. After the proclamation of the Third Republic in 1875, Bourneville was elected to the Paris Municipal Council in 1876, represented the Seine prefecture in 1879, and also served as a delegate to the National Assembly from 1883 to 1889. A well-known and dedicated proponent of public health, he was a member of the Higher Council for Public Health, the Higher Council of Public Assistance, and the Supervisory Council for Insane Asylums of the Seine Prefecture.

Even so, he always found the time for his modest private family practice at No. 6 Rue des Écoles (Rue de l'École de Médecine). It was not enough to prevent him from dying with little means in 1909. His student Noir, who performed his autopsy, stated, "after having provided constant care for the poor, he died poor himself".² Reports tell us that his casket was accompanied by a crowd consisting largely of nursing staff from hospitals and asylums. In keeping with his ideals, he was cremated and his ashes laid to rest in Père Lachaise Cemetery.

Personality, ideology, and socio-political context

Little has been written on Bourneville's private life. He was married and his wife preceded him in death in 1906. Their son Marcel, an infantry sergeant, died in the military hospital in Toul in 1914; he was 27 years old. Bourneville was not said to engage in any artistic or leisure pursuits. Rather, he was described as only having time for his professional and political crusades, which in the end were one and the same.⁴

There is no better description of Bourneville than the words he himself pronounced in 1876 when declaring his intentions upon being elected to the Paris Municipal Council:

I am an unknown but staunch soldier of democracy, and I have always sought two things: progress in ideas and justice in society. This means that I am a free thinker, and I intend to work tirelessly to unchain the human conscience. I am re-

solved to oppose the clerical party which, in the name of theology, strives to dominate national politics. I demand free, secular, and compulsory education and the abolition of the national budget for churches...All reforms aimed at placing the tax burden on capital obtained, rather than on work, shall find me their most fervent supporter.¹³

All of these radical, anticlerical, democratic-republican ideas that free-thinkers were hatching in those years in France (and not only in France) were nurtured by the liberal professions after the French Revolution of 1848. In particular, many young doctors joined this progressive movement. Delasiauve, Bourneville's influential teacher, provided the following summary of the doctor's role in cultural and social progress: "A doctor is above all a social man. He works his way into the hearts of different families and earns their trust....For medicine affects everything; there is no greater cultivator of civilisation". The Third Republic granted upward mobility and a political career to many young and politically left-leaning doctors. Several of them rose to the national level, including George Clemenceau; Bourneville was a part of his extreme left-wing party.

In light of these leanings, it is hardly surprising that Bourneville was also a devout Freemason. It seems he was influenced by his good friend Dr Henri Thulié, the Grand Master of the Grand Orient de France and a defender of humanist medicine.

An editor and writer

Bourneville's passionate love of writing began in his youth, as we clearly see from his works published when he was still an intern, and from decades of later works touching on the popular topics of his time: hysteria, multiple sclerosis, epilepsy, idiocy, etc. The Internet hosts a very complete list of his clinical studies^{11,12} along with numerous technical reports that he prepared when proposing or applying his social and care reforms.

A review of these clinical studies does not reveal major differences between Bourneville's style and that of his contemporaries at La Salpêtrière or at Bicêtre. His descriptions of patients, including both clinical reports and pathology studies (when pertinent), are extraordinarily meticulous, displaying painstaking attention to detail. These cases were published on their own merits, but also because they formed a part of the doctrine that Charcot's

school was creating. Within this doctrine, different patients were seen as having distinct varieties (*formes*) of the same process. For this reason, many cases that had been published independently, or which formed the basis for doctoral theses, were later grouped into larger works aiming to provide a global view of the process, such as his book on multiple sclerosis.¹⁴

Bourneville was an astoundingly prolific writer. For example, although he appears listed as the editor of the emblematic *Iconographie Photographique de La Salpêtrière*

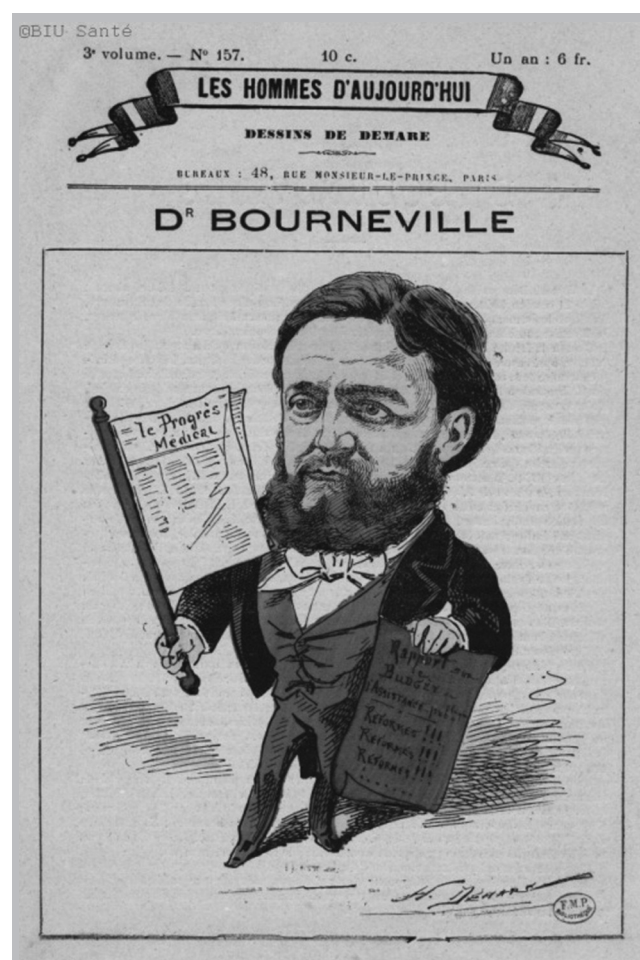


Figure 4. Fabulously detailed caricature of Bourneville: a physique dominated by his large head and short stature; a personality summed up by his beetling brow and defiant gaze. His political and social activities are represented by his savage pen and publications, especially *Le Progrès Médical*, grasped in his right hand; in his left, he clutches a document that is probably government-issued and containing budgets for reforms, reforms, and more reforms.

(1875-1880), he also penned hundreds of its pages, mostly in the form of articles on hysteria or hysterio-epilepsy. This journal came to an end in 1880, the year in which Bourneville parted ways with hysteria by becoming head of the paediatric department at Bicêtre. From that time on, he would devote all of his efforts to studying idiocy.

By this time, Bourneville had also felt the call to political action and was no longer content to write strictly about medicine. He had already spent more than a decade contributing to such publications as *Journal de médecine mentale*, *Médecine contemporaine*, *Le Pantheon de l'industrie et des arts*, *Réveil*, and *Le Mouvement Médical* (in the last case, as co-editor in chief). In 1873, he founded and was the editor-in-chief of *Le Progrès Médical* (Figure 4), a highly successful weekly publication that would be the first and main forum for his ideology and political action. Covering medicine, surgery, and pharmacy, *Le Progrès Médical* featured all types of advances and new concepts in the fields of biology, histology, experimental pathology, and especially microbial theory, asepsis, and antisepsis. It placed its faith in science, progress, and hospital reform. Not surprisingly, this entire movement met with the approval of Gambetta, the radical ideologist who would soon become president of the Assembly and head of the French government. His influence was a key factor in the success enjoyed by both Bourneville and Charcot. Table 1 lists the titles of Bourneville's principal editorial projects. Several of his publications remained active for decades, which attests to his unwavering persistence and commitment to his causes.

Bourneville was only 33 years old in 1873, when he founded *Le Progrès Médical*. He had yet to make a name for himself as a doctor. Charcot had risen to head of the department of the elderly (*pensionnées*) at La Salpêtrière in 1862 and would later become a full professor of anatomical pathology in 1872. The decade from 1862 to 1872 was extraordinarily productive for Charcot, thanks to the development of the anatomical-clinical method and his collaborative efforts with his good friend Vulpian and other distinguished figures, including Aran and Duchenne de Boulogne. Charcot laid the groundwork for a discipline, neurology, which had not even been named yet in France, although the American Neurological Society was already active, and the University of Pennsylvania became the first institution with a neurology professorship in 1871. However, Charcot would have to put in another ten years of work before being awarded the coveted chair of clinical diseases of the nervous system.

As a student or intern between 1862 and 1872, Bourneville was too young to have exerted an influence on Charcot. Nevertheless, his editorial and political support played a key role in his master's personal triumphs between 1873 and 1882, as the medical service at La Salpêtrière was transformed into a true multidisciplinary institute of nervous system diseases that was unrivalled at that time.

A politician and reformer

No one can accuse Bourneville of having entered politics merely to warm the bench. A quick glance at the literature documenting Bourneville's career at the municipal, regional, and national level reveals an amazing amount of work on his part. All of his initiatives were based on and coherent with the political ideals which we have already mentioned, even as he faced both rivals and disappointments. Léon Daudet, whose ideology was diametrically opposed to Bourneville's, caricatured the latter as 'Cloaquoil' in his novel *Les morticoles*, providing this mocking description: "as big as a boot, as red as a beet, vindictive and impassioned". Bourneville's insistence on making hospitals secular united his Church-aligned enemies and led Charcot to remark, "your proposal is very pretty, but putting it into practice will amount to professional suicide".

Bourneville's political and social initiatives can be grouped into two major categories: firstly, we find measures aimed at reforming hospitals, the medical professions, and medical care in general; and secondly, among the reforms he applied to his service in Bicêtre, we note his specific interest in developing a care model for mentally disabled children.

1. Major reforms

The first on Bourneville's list of major reforms was the process of secularising those hospitals managed by religious orders. Friars and nuns, especially the latter, often provided nursing care to hospitalised patients without having had any sort of training first. Bourneville found it especially incongruous that they should be responsible for dispensaries. In a series of incendiary essays, he accused nuns of doing nothing but proselytising, while leaving the real work to others and living the good life. The secularisation process would take three decades to complete, and it included changing the religious names of

hospital wards in addition to gradually substituting religious orders with trained nurses.

In addition to removing the nuns, Bourneville strove to create a professional body of qualified nurses. The first two schools, known as *écoles professionnelles d'infirmiers et d'infirmières laïques*, were launched at La Salpêtrière and Bicêtre in 1878. Later on in the same year, Bourneville prepared a nursing dictionary (*Petit dictionnaire des infirmières*), which he followed with a textbook in no fewer than five volumes (*Manuel pratique de la garde-malade et de l'infirmière*). That reference was finished in 1889 and re-edited several times. But in addition to ensuring basic training for nurses, Bourneville's concerns extended to their working and living conditions in hospitals, and their salaries, pensions, and so on. Following his medical-pedagogical model, he also designed a programme by which nurses would serve a dual function as the teachers (*institutrices*) of children with sensory deficits, but this aim was never achieved.

Regulating the healthcare professions was another of Bourneville's obsessions. In the later decades of the 19th century, medicine was taking its first steps toward understanding public health and combating infectious diseases. The hospital delivery rooms, according to Bourneville, were in a 'dreadful state'. Students completed practical les-

sons without a thought for hygiene, and interventions were entrusted to untrained surgeons. Epidemics, as well as infant and maternal deaths, were alarmingly common. With his usual energy and determination, Bourneville began bombarding the government with a series of reports in 1877, continuing until 1881 when the municipal council of Paris, aided substantially by Thulié and other doctors, established centres exclusively for pregnant and puerperal patients. These centres would be staffed by doctors specialising in childbirth and able to pass a competitive examination, a requirement which awakened the ire of many formerly qualified practitioners. As he had done in other areas, Bourneville followed up on and cemented his professional reforms by applying them to the educational system. With this goal in mind, he contributed to organising clinical and practical obstetrical training, including official licensing requirements for midwives.

Bourneville also spearheaded many other reform projects that can briefly be summarised as follows: creating a qualifying exam for alienists, promoting public libraries (especially libraries for medical students), establishing a student ID number system, first chair of mental illness (held by Ball), developing guidelines for improving patient nutrition, using outdoor baths and hydrotherapy in hospitals, implementing isolation techniques for infectious patients, sanitising the Seine watercourse, opposing agricultural use of blackwater, and promoting the practice of cremation. As president of the Cremation Society, he very aptly requested that procedure for himself.

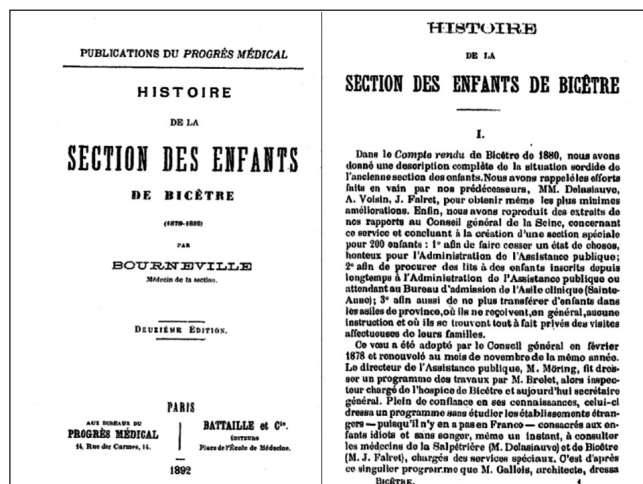


Figure 5. Front cover and first page of *Histoire de la section des enfants de Bicêtre*, published by Bourneville in 1892. This first page describes the boys' sordid living conditions and the failure on the part of Bourneville's predecessors to improve what he called "a shameful state of affairs" for l'Assistance Publique. His story ends with a triumphant shout: "nous avons réussi!"

2. Reforming the boys' ward in the Bicêtre: a medical-pedagogical model

This reform was Bourneville's most personal project, and it is thrilling to be able to read every detail of how it was accomplished. Bourneville published his story, titled *Histoire de la section des enfants de Bicêtre*, with support from *Le Progrès Médical* in 1892 (Figure 5)¹⁵.

The doctor begins by referencing his report from 1880, just a year after he was made department head, on the 'sordid conditions' in which the boys lived. They were jumbled together with adults and housed in unsanitary spaces, without any regard for their individual needs. In Bourneville's words, this was a shameful situation for the Administration de l'Assistance Publique. He mentions his predecessors' fruitless attempts at improving this state of

affairs, and the need for a well-structured, ambitious, and long-term plan of action.

This text covers almost 130 pages and describes all of Bourneville's administrative and political dealings so as to have the plans approved, obtain a budget, hire architects, and so on. It includes the blueprints of the buildings and itemised lists for each budget broken down by fiscal year; a Herculean task. We quite understand why Bourneville finished this report on such a triumphant note ("nous avons réussi"), and without forgetting to thank those who had lent him the most support. The result was undeniably magnificent: new, modern buildings housing more than 400 boys (the original plans could only accommodate some 200). In addition, every convenience imaginable: classrooms, workshops of all sorts, gymnasiums, gardens, an infirmary, recreational equipment, etc. In just a few years, his dream had come true.

But despite the above, Bourneville's greatest contribution was of a more conceptual and methodological nature. In his time, the concepts and classification systems passed down from Pinel and Esquirol were still in use. Many of the boys institutionalised in Bicêtre had been categorised as *idiots*; this denomination conveyed that they were incurable, it was useless to try to train or treat them, and that it was permissible to keep them locked away.^{7,8} Since idiocy was not an illness, it was understood to be an irreversible state that did not require therapy and would not respond to educational strategies. There was no place for research into how to improve these boys' lot in life; in contrast, researchers supporting the seeds of what would become eugenics were already referring to 'worthless lives'.

Bourneville framed overarching reforms. He categorised the boys in different but flexible levels according to their deficiencies in order to draw up their treatment and educational plans. He turned a deaf ear to arguments of irreversibility and entertained the possibility that even the most profoundly retarded could improve, and that they should not be shut away. One of his most well-known initiatives in his quest to open the doors of the asylum was to host parties during which the boys would do gymnastics or play music in groups (*fanfares*). He managed to attract the elegant ladies of *tout Paris*, and their charitable donations, to these events. His annual reports did not leave out these activities, and they even listed the prizes awarded for the gymnastics and music competitions.

The most obvious proof of Bourneville's determination to carry out his project at Bicêtre was his yearly series of studies titled *Recherches cliniques et thérapeutiques sur l'épilepsie, l'hystérie et l'idiotie*. He had already published similar series at La Salpêtrière, but limited to hysteria and epilepsy, between 1872 and 1875. Under this title, followed by the subtitle *Compte-rendu du service des épileptiques et des enfants idiots et arriérés de Bicêtre*, Bourneville would publish one volume every year until his retirement. Both the title and the subtitle were chosen to show precise intentions. With his reference to 'clinical research', he made it clear that much had yet to be learned with respect to disabled and retarded children. By employing the term 'therapeutic', he underlines his full commitment to improving the lives of these children, even the 'idiots' who had once been left to their fate. *Compte-rendu* may refer to a financial report, and here it describes his yearly accounts of how the institution's allotted funds and public resources were used. Under this system, every volume was divided into two or more parts; in the first, Bourneville describes, showing infectious enthusiasm, the activities carried out in the year in question, ranging from educational activities of all types, to playtime, walks, excursions, visits by family, occupational therapy, and so on. Leaving political or professional interests aside, it is impossible to imagine anyone taking on such a workload without feeling genuine affection for these boys, and this is a startling revelation considering Bourneville's severe personality.

He dedicated the second part of each volume of *Recherches* to the clinical observations and pathology studies that he considered the most important of the year. Some were signed by Bourneville alone, but most were written in collaboration with other researchers.

Not content to confine his labours to his department at Bicêtre, Bourneville pushed to modify the law such that the decision to institutionalise a child could be reversed. Depending on their response to re-education, the boys might then leave the asylum. As was logical, Bourneville had to create the concept of a 'medical-pedagogical institution' to be able to expound his ideas.

3. Fondation Vallée

Hippolyte T. Vallée had been the superintendent at Bicêtre between 1841 and 1843, where he witnessed Seguin's futile attempts at improving care for the boys. In

about 1846, a rich family entrusted Vallée with the care of their mentally impaired son, and they granted him the use of a house in Gentilly. Shortly thereafter, Vallée bought a neighbouring property and started his foundation. When he died in 1885, he left it to the Seine department on the condition that it be used for educating poor and mentally impaired girls. It seems that this foundation was then assigned to Hospice de Bicêtre for administrative reasons, so Bourneville became its director in 1890.

In November 1892, Bourneville used his own money to buy several tracts of land in what is now Parc du Coteau. The wrought-iron gate at the entrance still displays a stylish 'B' to remind us of its former owner. Here, Bourneville began work once more on his ambitious medical-pedagogical projects and engaged in one of his most quixotic and emblematic battles. Among its many trees, the park boasted a beautiful hundred-year-old Lebanese cedar which Buffon had planted. Nevertheless, the city had plans to build a road through the park that would threaten the famous cedar. Bourneville put a stop to this plan, and the city finally plotted Rue Édouard Til on a curved route around the park, rather than through it.

A genius and icon

In February 1893, Bourneville opened his Medical-Pedagogical Institute, described in his leaflets as being "in the countryside, far from any factories, offering all of the advantages of open-air schools while still near Paris". The Fondation Vallée's medical-pedagogical institute remains active to this day, although it does not occupy the doctor's original facilities, which are dedicated to other activities related to natural studies. The classroom still bears Bourneville's name. In the Fondation's new building, we find a short-stay ward for troubled adolescents that is also named after Bourneville. The legal disposition created not so long ago in France to set up medical-pedagogical institutions is merely a rediscovery of the initiatives that Bourneville launched at Bicêtre and the Fondation Vallée.

Discussion

A large percentage of Bourneville's reforms have been inexplicably and unfairly forgotten. After his death, ideas completely opposed to his own began to take root. Alfred Binet, director of the psychophysiology laboratory at La Sorbonne, worked with Théodore Simon to develop the concepts of age-related 'measures' and 'scales' of intelli-

gence. This rigid stance contrasted with Bourneville's more dynamic approach. When France's mandatory schooling law was enacted, the authorities soon dictated who would be able to benefit from its provisions and who had to be excluded on the grounds of being deemed unable to learn. This approach, with its scientific guise and its twin pillars of performance and efficiency, spelled the end for Bourneville's more humanistic, progressive, and philanthropic ideals. Once again, children would be classified as either 'school-bound defectives' or 'institutionalised defectives'; the former would receive training in the classroom, while the latter would be locked away for good. Almost a century would pass before new laws ended this state of affairs and resulted in attempts at integrating all mentally disabled children.

The children's department at Bicêtre, once described as 'the glory of France', 'a world-class centre', and 'a top quality experiment' was suppressed in 1920 because government authorities were unwilling to involve themselves in the care of disabled children.

Bourneville was clear-sighted. As a veteran of too many battles waged against the soulless incomprehension of government bureaucracy, he knew to prepare for the worst. But he also believed, and in this he was correct, that his work would be continued by others; possibly not in France, in which he had little faith, but at least in other countries. In his own words:

*Si, nous disparu, notre oeuvre périclité ou disparaît en France, comme a disparu tout ce que Leuret et Séguin avaient organisé, car nous ne nous faisons pas d'illusion sur l'absence de conviction administrative, nous avons le ferme espoir qu'elle sera continuée, développée, perfectionnée dans les autres pays. Notre plaidoyer en faveur de ceux qui ne peuvent plaider pour eux-mêmes n'aura pas été stérile.**

One who has reviewed Bourneville's life and works will find it quite ironic that his name went down in history for the description of a single clinical case that he happened upon by accident¹⁶ before encountering another ten cases and summarising them in a follow-up article. It is all very well and good that he is remembered, but it seems unjust not to count him among those who have

* If, after our passing, our project were to fade away or disappear in France, as occurred with everything that Leuret and Séguin achieved, –for we cannot fail to perceive the lack of government interest– we nonetheless feel certain that the project will live on to be developed and perfected in other countries. Our pleas for those unable to plead their own cause will therefore not have been in vain.

Table 1. Major medical publications written or edited by Bourneville

1872-1908	<i>Recherches cliniques et therapeutiques sur l'épilepsie, l'hystérie et l'idiotie: compte-rendu du service des enfants idiots, épileptiques et arriérés de Bicêtre</i>
1869-1876	<i>Revue photographique des hôpitaux de Paris</i>
1876-1880	<i>Iconographie photographique de la Salpêtrière</i>
1880	<i>Archives de Neurologie</i> (chief writer, 1880-1909)
1881	<i>L'Année Médicale</i> (founder)
1882-1892	<i>Bibliothèque diabolique</i>
1883	<i>Manuel des injections sous-cutanées</i>
1885	<i>Manuel technique des autopsies</i>
1889	<i>Manuel pratique de la garde-malade et de l'infirmière</i> (5 volumes)

most contributed to progress in medicine, particularly in the area of universal care for mentally disabled children.

Conflicts of interest

The author has no conflicts of interest to declare.

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References

- Poirier J, Signoret JL. De Bourneville à la sclérose tubéreuse: une époque, un homme, une maladie. Paris: Flammarion; 1991.
- Noir J. La carrière et l'oeuvre de Bourneville. *Le Progrès médical*. 1925;30:318-9.
- Paciaroni M, Cittadini E, Bogousslavsky J. Great careers: Cornil, Bouchard, Bourneville and Proust. *Front Neurol Neurosci*. 2011;29:61-70.
- Poirier J, Chrétien F. Désiré Bourneville (1840-1909). *J Neurol*. 2000;247:481.
- Benda CE. Désiré Magloire Bourneville (1840-1909). In: Haymaker W, Schiller F, eds. *The founders of neurology: one hundred and forty-six biographical sketches by eighty-eight authors*. 2nd ed. Springfield (IL): C.C. Thomas; [s.d.]. p. 410-3.
- Gomez MR. Désiré Magloire Bourneville. In: Ashwal S, ed. *The founders of child neurology*. San Francisco: Norman Pub.; 1990. p. 177-82.
- Gateaux-Mennecier J. Bourneville: la médecine mentale et l'enfance. Paris: L'Harmattan; 2003.
- Jeanne Y. Désiré Magloire Bourneville, rendre leur humanité aux enfants "idiots". *Reliance*. 2007;2:144-8.
- Bibliothèque numérique Medic@ [Internet]. Paris: Université Paris Descartes. [s.d.]. [accessed 2015 Sep 16]. Available from: <http://www.biusante.parisdescartes.fr/histmed/medica.htm>
- Jubilothèque: archives de neurologie (1880-1907) [Internet]. Paris: Université Pierre et Marie Curie. [s.d.]. [accessed 16 Sep 2015]. Available from: http://jubilotheque.upmc.fr/subset.html?name=collections&id=charcot_archives_neurologie
- Ancien catalogue médecine numérisé [Internet]. Paris: Université Paris Descartes. [s.d.]. [accessed 2015 Sep 16]. Available from: <http://www2.biusante.parisdescartes.fr/hm/>
- Bibliothèque nationale de France [Internet]. Paris: Bibliothèque nationale de France. ©2015. Désiré Magloire Bourneville (1840-1909). [accessed 2015 Sep 16]. Available from: http://data.bnf.fr/11893503/desire_magloire_bourneville/.
- Gateaux-Mennecier J. L'oeuvre médico-sociale de Bourneville. *Hist Sci Med* [Internet]. 2003 [accessed 2015 Sep 16];37:13-30. Available from: <http://www.biusante.parisdescartes.fr/sfhm/hsm/HSMx2003x037x001/HSMx2003x037x001x0013.pdf>
- Bourneville DM, Guérard L. De la sclérose en plaques disséminées. Paris: A. Delahaye; 1869.
- Bourneville DM. Histoire de la section des enfants de Bicêtre. 2 ed. Paris: Battaille; 1892.
- Bourneville DM. Contribution à l'étude de l'idiotie. *Arch Neurol (Paris)*. 1880;1:69-91