

ИССЛЕДОВАНИЯ

Pure Science or Practical Science: The Difficult Choice of the Brussels Botanic Garden (1826–1914)

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Botanic gardens' purposes have varied in time and space from their medicinal origins in the Italian universities to the somewhat multi-purpose function they have today. The history of the Brussels Botanic Garden, established as a company in 1826, suggests that it was first fashioned by the then leading-class and its needs: it tended to focus on agricultural and industrial developments as well as selling luxury goods. Later, as a State institution from 1870 until the First World War, the Botanic Garden had to deal not only with the diversification of disciplines and new trends in the sciences, but also with growing democracy alongside the concomitant political and philosophical issues. In such a context dreams of “pure” science, like taxonomy and floristics, had to cope with practical and political issues linked to the growing social demands and the garnering of votes.

Keywords: botanic garden, Belgium, politics, popularization, botanical museum, forestry museum, pisciculture, usefulness, silkworm breeding, arboretum, colonies, horticulture, taxonomy, aquarium, liberalism, Catholicism, mercantilism, experimentation.

Introduction

In this contribution I shall depict how two different ‘life forms’ that were quite similar — two botanic gardens laid in the exact same premises — dealt with sciences, that is to say: How did they deal with what is conveniently called “pure science” and “applied” or “practical science”? Firstly, I shall attempt to outline the strategies chosen by a team of Brussels Bourgeois to save their very own botanic garden from bankruptcy. Then, I shall boldly paint the strategies chosen by their successors, though in a botanic garden of a different kind, to match the expectations and demands of a changing society.

1826–1870: the Time of the Private Botanic Garden

In 1826, the old ‘Jardin des Plantes’ that the French regime had created in Brussels in 1796 to support the educational programs of the newborn *École centrale du Département de la Dyle* was run down and regarded by some as a hindrance to the city’s development (Balis, p. 1–6).



Fig. 1. Tsar Alexander II cheered by the crowd on the trendy Boulevard Botanique (1874).
Collection of the author

Consequently, in 1825 a group of local bourgeois decided to establish a brand new botanic garden in Brussels. Surprisingly from our present perspective, they decided to set up a private company to achieve their goal. It seems they considered this approach as being the most effective in creating a vast enough garden to become an emblem for the capital, which at the time was part of the Kingdom of the Netherlands. The City's administration, the national authorities as well as King Wilhelm van Orange (1792–1849) himself, were all in support of the company that consequently had no trouble enlisting shareholders. The future looked very secure and bright (see Diagre, 2011a, esp. p. 17–27).

The second article of the statutes of the *Société Royale d'Horticulture des Pays-Bas* reads as follows:

“The company has the goal of establishing in Brussels a vast garden where all the species of plants, ornamental as well as useful, will be mass cultivated using all the means and developments that the current state of science allows, and perfecting trials will be attempted, the results of which will be spread throughout the Kingdom”¹.

The leaflet addressed to potential local bourgeoisie shareholders stated that this “national” garden would be devoted to experimentation with the aim of tipping the national trade-balance in favor of the Netherlands by improving agriculture and horticulture. Several training centers were planned in the garden, such as the future school of botany devoted to taxonomy, the school

¹ Statuts de la Société Royale d'Horticulture des Pays-Bas. Art. 2. P. 8–9. Archives de la Société Royale d'Horticulture (hereafter – ASRH). № 3.

of horticulture, the school of forestry and fruit trees². Some planned areas were to be devoted to attempts made to acclimatize promising exotic plants. It must also be highlighted that among the main objectives of the Botanic Garden were the revival of viticulture, the introduction of the silk worm and the artificial production of every possible soil type, as well as experiments on their suitability for different cultures³. As a result, the new Botanic Garden was supposed to be “useful and big”, and a “monument dedicated to the horticultural industry”⁴. In 1826 an American agronomist E. Klynton who lived in the Netherlands underlined the usefulness of the Botanic Garden soon to be erected just beyond the city limits⁵.

All went smoothly until the outbreak of the National Revolution of 1830 that made Belgium an independent State. From this moment, the fledgling Belgians faced political, economical and financial problems (Witte, Craeybeckx, 1987, p. 14–17). In the midst of this chaos the Botanic Garden started out on a long and difficult road.

The difficulties were firstly, that some members of the board were regarded as “*orangists*”, that is to say loyal to Wilhelm van Oranje, the King of the Netherlands. Secondly, the new Home Office, the Chambers and the City administration were no longer as eager to support the Botanic Garden because of the dire financial conditions, and also because:

“(I do not think) that the (Botanic Garden) is making attempts with regards to acclimatizing and rendering useful to us these foreign plants, and what I think is certain is that no discovery of this type has yet compensated the nature of the funding it receives from the States. I therefore consider the establishment to be a luxury object from which only Brussels can draw any pleasure or even advantages...”⁶

The Prime Minister echoed those words to the board members of the Botanic Garden and insisted that no financial support would be maintained unless the company proved its usefulness to the whole country by experimenting new plants and products⁷. This set the tune for the next 40 years. Summoned, so to speak, to prove that it offered more than a promenade for the neighbors and the rich and famous, the Botanic Garden fashioned a strategy.

At first, to earn money it began to sell plants by the thousands despite the fact that it entered into competition with the Belgian nurserymen. The latter complained that as they did not get any State support, competition with the “shareholders’ garden” was unfair. Thus, to soothe the Chambers and the Home Office the Botanic Garden also launched experiments on *Phaseolus* (beans), on cereals, potatoes, trees, curcuma, tobacco, seeds from Chile etc., and became involved in the Belgian “sericultural utopia” that was supposed to create a new industry in the country (see: Diagre, 2006, 2011a).

Later, in the mid 1850’s, the board decided to set up a botanical museum, like the one that had been opened at Kew, in 1848 (Desmond, p. 191 ssq.). In 1854, the board made this plea to the Prime Minister:

² Schools were areas where training in certain activities, like pruning or grafting, were held and demonstrated. As for the school of botany, it used to show the plant classification system chosen by the institution and, as such, was a crucial part of the 19th century botanic gardens.

³ Statuts de la Société Royale d’Horticulture des Pays-Bas. P. 3–6. ASRH. № 3.

⁴ Ibid. P. 4.

⁵ Journal d’Agriculture, d’économie rurale et des manufactures du Royaume des Pays-Bas. Bruxelles-Gand, 1826. T. 3. P. 55.

⁶ Courrier Belge. 12/4/1832.

⁷ Letter from Minister Ch. Rogier to the board of the Botanic Garden. 6/11/1832. ASRH. № 116.

“It is easy to understand the services these comparative collections can give to science, to the arts, and to industry; and the lessons that the students of natural sciences, the pharmacists and the doctors could draw from them”⁸.

These words were quite similar to the pleas of the Kew Gardens’ Director (W. Hooker, 1795–1865) before the Woods and Forest administration, eight years before (Drayton, p. 193). It was not in vain, since in 1859 the board of the Botanic Garden could boast of the newborn museum:

“The Museum of Botany is already starting to become a precious resource full of lessons for the scientist, the industrialist, the farmer, and the man of the world <...>. This museum will, in time, contain not only all of the world’s plants, conserved in such a way as to facilitate the study of botany, but also all the products of these plants in the form of gums, resins, flours, seeds, primitive medicines, the primary materials extracted from plants and all the different types of wood that are used or could potentially be used by people. From its creation, the idea that Brussels would be endowed with such a museum was applauded. In a way, it will be a plant history of the planet, which can then be studied from every angle. To make it even more complete, there could be an annex to the museum in the future that would contain collections of the animals, birds and insects that live off the plants, those that are pests, which is important to be aware of, and those that transform certain plant parts into products useful to man.”⁹

Last but definitely not least, still following the example of great British institutions¹⁰, the Botanic Garden established several aquaria (Diagre, 2011b). At first glance, this looked like a way to hook visitors and increase the earnings of the company, cloaked in the progress of “pure” science. And it was. It may be interpreted as a Belgian expression of the so-called ‘Age of Museums’ and trend for popularization of science that ruled in 19th century Europe (Lightman, p. 199; Drayton, p. 192 ssq.; Kretschmann, p. 126 ssq.). But it also led to the creation of the Belgian Pisciculture Society at the Botanic Garden, in 1861 (Diagre, 2011a, p. 65). With this, the Botanic Garden was supposed to become a real pisciculture research center dedicated to the issue of repopulating Belgium’s rivers, a source of much anxiety at the time (de Selys, 1866). A stream had already been dug in the garden in 1856 in order to set up a fish farm stocked with Salmonids eggs. In this field the Botanic Garden was a forerunner (Diagre, 2011b, p. 65). Nevertheless, like in the case of the museum of botany, the reasons behind this project were the need to compete with the attractions of the new Brussels Zoo (Diagre, 2011a, p. 65; Brauman, Demanet, p. 9–42), the need to attract visitors¹¹, coupled with the obligation to show the politicians that the State and the City’s funds were going towards promoting technologies that could prove useful to the whole country. The project offered the advantage of killing two birds with one stone.

Yet, all this was done in vain as, by 1860, the company and its Botanic Garden were doomed. The running costs were indeed too high, even with the financial supports of the State and City administration. The situation was bleak, the buildings were deteriorating, the money used to create attractions mostly consumed time and means, and the benefits for agriculture and horticulture were negligible, if any. The garden also lacked a director with an academic background. The company was crumbling (Diagre, 2011a, p. 70–74).

⁸ Letter from the board of the RHS to the Prime Minister. 15/1/1854. ASRH. Correspondences. T. 4.

⁹ Assembly of the Shareholders. 14/2/1859. ASRH. Minutes of the Board. T. 3.

¹⁰ Letter from A. Schram to P.C. Michell, director of the Regent’s Park Zoo, in London. 22/4/1855. ASRH. Correspondence. T. 4.

¹¹ It was a success, since incomes increased after the opening of the aquaria. See: Assembly of the Shareholders. 8/2/1858. ASRH. Minutes of the Board. T. 3.



Fig. 2 & 3. Uncommon circular pattern of the School of (systematic) Botany that was created in the Brussels Botanic Garden around 1830. It was then a crucial element of any modern botanic garden. (henceforth Collection of the National Botanic Garden of Belgium)

Finally, the Belgian State bought the Botanic Garden from the shareholders in 1870. In a nutshell, one could say the Brussels Botanic Garden was born in the wake of the liberal utopia, though with a pinch of mercantilism (Veraghtert, p. 129 ssq., p. 351 ssq.). As a consequence, it was, from its very origin, supposed to dedicate itself to applied sciences to support agriculture and the growing national industry, and to set the country free from importing some luxury products. But it never excelled in that field. Instead, pressed by necessity, it dedicated most of its time to entertaining and pleasing the local elite, while carrying out somewhat phoney scientific research to lure the national and city administrations.

Second Leg: A State Institution in the Midst of the Growing Democracy 1870–1884: Building a State Botanic Garden from Scratch

The State Botanic Garden was established in 1870 thanks to an old-school botanist, who was also a member of the Catholic political group in the Parliament: Barthélemy Dumortier (1797–1878). He dreamed of a *Belgian Kew*, that is to say an idealized garden fully dedicated to taxonomy, with a thick herbarium and a renowned school of systematic botany. Any other activity he considered incidental (Diagre, 2011a, p. 79–81). Was this to be the dawn of auspicious days for “pure science” in the new Botanic Garden? Not really.

As early as 1873, Dumortier was fighting his colleagues of the Supervisory Board. He claimed:

“<...> all horticulture amateurs against only one botanist, despite my active opposition, have decided to transform the Botanic Garden into a horticultural park, a resolution which would entirely disrupt and spoil the establishment and which neither my honour as a scientist nor my responsibility as a member of Parliament can permit me to accept”.¹²

The next year, he added:

“The study of botany does not consist of learning the name of plants by heart as do gardeners and horticulturalists, it consists of classifying plants by class, family, genus and species, a classification that reveals the relationships of plants with each other, whilst being Ariadne’s thread for arriving at the knowledge of living things, and without which botany would be chaos. There is the whole of Science”.¹³

When all was said and done, it seemed that so-called “pure science” had finally found a home in the State Botanic Garden, thanks to Dumortier’s stubbornness and lobbying.

That said 5 schools were laid in 1875, including some that had nothing to do with “pure science”. Besides the school of botany that was, at first glance, more orientated “pure science” or “philosophical botany”, the schools of horticulture, edible plants, medicinal plants and school of technology came into existence¹⁴. They were mostly focused on usefulness or applied science.

The utility of the schools, and by extension of the whole Botanic Garden, was often purposely boasted by new Director François Crépin (1830–1903), who reigned on the institution

¹² Letter from Dumortier to the Minister of the Interior, 3/12/1873. Archives du Jardin botanique (hereafter — AJB). № 110.

¹³ Letter from Dumortier to the Minister of the Interior. 15/9/1874. AJB. № 110.

¹⁴ Rapport d’Élie Marchal, Plantes de Pleine Terre. 4/1/1876. AJB. № 214–219.



Fig. 4. The Italian Garden was projected in 1903 to add an aesthetic touch to the State Botanic Garden. The power of a rising democracy had then made pleasing the crowd more important than before

from 1876 to 1901. It showed that utility was becoming all but crucial to the survival of the Botanic Garden. On occasion, Crépin also mentioned the steadily growing figures of visitors¹⁵ with the aim of pleasing the Home Office.

Next to the developing herbarium and the set of schools inspired by the ones at Kew Gardens, another collection, also inspired by English counterparts like Kew, the Pharmaceutical Society, the Linnean Society and the British Museum¹⁶, was emerging. Once again, it had nothing to do with “pure science” — it was the collection of plant products. In 1882 it included some 4,100 jars on 16 racks¹⁷. It was divided in 5 groups that reflected the aforementioned schools: medicinal products, edible products, industrial products, carpology, endemic and exotic woods (Petit Guide... 1885, p. 13–15). As for the once mentioned autonomous paleobotanical group, it

¹⁵ *Rapport de M. Crépin, directeur du Jardin botanique de l'État, sur la situation de cet établissement // Moniteur Belge. 18/4/1877. N° 108. P. 3–4; Idem. Crépin, directeur du Jardin botanique de l'État, sur la situation de cet établissement, daté du 10/1/1879 // Moniteur Belge. 1879, Partie non officielle. P. 436; Idem. Crépin, directeur du Jardin botanique de l'État, sur la situation de cet établissement, pour les années 1879 et 1880 // Moniteur belge. Bruxelles. 1881. P. 491. Jardin Botanique de l'État, rapport adressé à monsieur le ministre de l'Intérieur. 29/3/1882 // Moniteur Belge. 12/4/1882. N° 102. P. 3–4.*

¹⁶ *Rapport de J. Bommer à Crépin. 30/9/1877. AJB. N° 208.*

¹⁷ *Jardin Botanique de l'État. Rapport adressé à monsieur le ministre de l'Intérieur. 29/3/1882 // Moniteur Belge. 12/4/1882. N° 102. P. 1.*

was actually incorporated in the Museum of Botanical Products¹⁸. One might suspect that its philosophical or purely scientific purposes were of minor interest to the Home Office. Yet, quite interestingly, when paleobotany was supposed to support industrial development, François Crépin, who was an expert in plants of the Tertiary, was summoned by the Home Office to join the project of National Geological Map, in 1877¹⁹. We reckon that, as the Belgian industry demanded more coal, François Crépin's skills in paleobotany seemed more valuable to the politicians.

1884, a Turning Point

During the 1870s, political Catholicism had strategically revived its age-old interest in the rural world. Political frustration, the migration of country people to the cities, which were perceived as centres of vice, and the growing resistance to modernity and anything that came with it (Liberalism, secularisation, materialism, Socialism etc.), provoked a conservative reaction, and a return to a social group that incarnated resistance to the turbulence and troubles of the times: the people earning a living from the earth (Van Molle, p. 69–73).

In 1884, the Catholics took full power and, although they did yet not know it, their reign would last three decades (Lory, 1986, p. 1–8; Wils, 1986, p. 67–97). This date hence also marks the creation of the first Belgian Ministry of Agriculture.

The minister immediately displayed a desire to favour horticulture and to popularise agricultural science (Van Molle, 1989, p. 108–109; Wils, 1986, p. 83). In 1886, the Royal Speech unveiled the central themes of the Catholic ministers' strategy in this sector, amongst which the development of agricultural education and the popularization of scientific routines occupied positions of honour (Van Molle, 1989, p. 110). The State Botanic Garden, from 1884 onwards and within the Department of Agriculture's jurisdiction — a fact that spoke for itself — became a tool for winning rural voters over to the political branch of Belgian Catholicism. This impacted the life of the institution, as did the extension of suffrage in 1893 — which multiplied by ten the number of voters (Van Eenoo, 2003, p. 60) — and the subsequent hunt for voters. In the Parliament, a Liberal Representative once said that there was “nothing in common”²⁰, between the Botanic Garden and the Ministry of Agriculture... but in vain.

To make matters worse, the Botanic Garden suffered from another relative handicap: its involvement with the administration of the City of Brussels and the University of Brussels, both of which were regarded as Liberal and Masonic cauldrons by the Catholic politicians²¹.

The future was no longer as bright for the taxonomists of the State Botanic Garden who had hoped to fulfill “their purpose” — pure science — in an Ivory Tower, when the politicians began to exploit the Botanic Garden shamelessly. Some facts illustrate this observation more clearly.

¹⁸ Rapport de Crépin sur les activités du Jardin botanique en 1897, 6/3/1898. AJB. № 211–213.

¹⁹ Letter from Delcour to Crépin. 8/3/1877. AJB. № 150–151. See also Diagre, 2011a, p. 171–172.

²⁰ Annales Parlementaires de Belgique. Chambre des Représentants. Bruxelles, 1885. Séance du 10/5/1885. P. 1182–1183.

²¹ The University of Brussels was created in 1834 with the financial support of the local Freemasonry. It was a competitor to the Catholic University of Leuven, and it promoted freethinking and liberalism. For these reasons, the Belgian Catholic authorities condemned Freemasonry in 1837 and urged the congregants to leave the Masonic lodges. The struggle between the Belgian Church and the Freemasonry, and between Catholic politicians and Liberal (and emerging Socialist) politicians overlapped. The battle was raging at the end of the 19th century (Bartier, 1984, p. 319–342; 1994, p. 193–218).



Fig. 05 & 06. The Museum of Forestry was inaugurated in 1902. Along with the arboretum located in the Brussels suburbs, it targeted the countryside voters who embodied resistance against urban Socialism and Liberalism

In 1891, for instance, the institution was told to host the trials for the *Société de Pisciculture de Belgique* again, which was detrimental to its collections²². This reflected the Minister of Agriculture's concern for the future of fishing resources. The same year, despite the fact that sending packets of seeds and plants to schools was putting a strain on the institution, the minister also urged the Botanic Garden to go on with this obligation²³. In 1892, the minister tried to compel it to host popular horticultural shows²⁴, and in 1895, he forced it to give speeches to popularize and teach horticulture and agriculture. This henceforth became an official "mission" of the State Botanic Garden²⁵. In 1899, the Minister promoted the Museum of Forestry project²⁶, and imposed Count Amédée Visart de Bocarmé (1835–1924) and Léon Grosjean (1846–1922), both Catholic, onto the Scientific Board²⁷. The first was a specialist in forestry, the latter a prominent horticulturalist. A few months after, Paul Nijpels (1865–1910), a "phytopathologist", was hired by the State Botanic Garden to deal with very practical issues²⁸. In 1901, the Minister urged the Botanic Garden to heighten support for the development of national horticulture and to put more energy into "experimental research"²⁹ — which meant: research in applied botany. Furthermore, despite the fact that it was consuming time and space, it was not until 1903 that the Minister of Agriculture released the Botanic Garden from its obligation to provide the State buildings with ornamental plants³⁰. We suggest that this volte-face happened because King Leopold II (1835–1909) wanted to give more space, time and money to the still-to-come Colonial and Experimental Section which would help him in his own colonial venture... but also because some professional nurserymen had complained to the Minister as to the fact that the State Garden grew plants that they themselves, should have sold to the Belgian Government³¹.

All those facts showed ministerial contempt for the State Botanic Garden, but also proved that it had become a mere tool in the Catholic politicians' hands to seduce their favourite audience and voters. But their move was not completed yet, since they were brewing a Great Reform of the institution.

The Great Reform of 1902

Yet again, the reform showed a powerful and imperious political desire to secure a return from the Botanic Garden that was at times considered unproductive. This would be a constant source of tension for the Director, and from that point onwards he would never cease to highlight the practical consequences of his staff's activities. In short, this was a tension born out of permanent conflict between 'pure science', seen as noble, because it was a selfless pursuit, and the duty of applied science, and even beauty, related to the everyday and more visible in the world of the layperson. Several facts support this conclusion.

²² Minutes of the Supervisory Board. 29/11/1888 et 25/5/1891. AJB. № 3.

²³ Letter from L. Lubbers to the Minister of Agriculture. 3/8/1891. AJB. № 158.

²⁴ Minutes of the Supervisory Board. 21/11/1890 et 29/3/1892. AJB. № 3.

²⁵ Minutes of the Supervisory Board. 19/6/1895. See also: Minutes of the Supervisory Board. 7/3/1898. AJB. № 3.

²⁶ Minutes of the Supervisory Board. 5/5/1899. AJB. № 3.

²⁷ Minutes of the Supervisory Board. 21/10/1899. AJB. № 3.

²⁸ Idem.

²⁹ Minutes of the Supervisory Board. 5/11/1901. AJB. № 4.

³⁰ Rapport du ministre Van der Bruggen au Roi. Jardin botanique de l'État. Personnel et Conseil de surveillance // *Moniteur Belge*. 10–11/2/1902.

³¹ Minutes of the Supervisory Board, 04/07/1903. AJB. № 4.

Firstly, a Colonial and Experimental Section was created in the Great Reform. Some taxonomists of the institution had, from as early as the mid-1890s, begun producing acclaimed studies on the flora of Congo, albeit not contractually (see: Diagre, 2011a, p. 177–184, 192). Then, from 1895 on, the Botanic Garden was charged of promoting the African private property of Leopold II (1835–1909) by the King’s own colonial administration. Practical issues were becoming crucial in this scientific backing of the soon-to-be Belgian colony³².

Secondly, the Belgian Minister of Agriculture urged the State institution to create and give extension to “popularization” collections. This is especially clear in the improvements that were to be made to the Museum of Botany, the opening of the Museum of Forestry and the creation of the Phytogeographic Arboretum near Brussels.

From then on, the Museum of Botany would be divided in two subsections: a popularisation section — dedicated to schools, students, laymen etc. — and a research / scientific section, for the scientists³³.

As for the Museum of Forestry and the Arboretum they were inseparable from the context that saw the creation of the Higher Forestry Board and the Central Forestry Society of Belgium, in 1893. Both were created, or at least initiated and supported, by the Catholic ministers (Tallier, 2004, p. 574–576; Diagre, 2011a, p. 168–171). The Higher Forestry Board had to give advice and scientific recommendations to the Ministry of Agriculture; while the Central Forestry Society had to put the emphasis on popularization of so-called “forestry science” (Com-mémoration du 75^e anniversaire... p. 14).

In concerning themselves with the forestry issue, the Catholic Party was wooing great landowners and industrialists who were threatened by a lack of timber, as well as farmers concerned about soil erosion due to deforestation. This was an electoral goldmine.

The project of a Forestry Museum was for the first time, as far as one knows, mentioned in 1888 and it was, from its very origins, meant to popularize practical science³⁴.

In addition to the dry collections and illustrations of the Museum, some Members of the Parliament and forest specialists insisted on the necessity of designing a vast arboretum³⁵. The curator of both, Charles Bommer (1866–1938), would give it a phytogeographic structure so as to be useful to both the ‘pure scientists’, who paid attention to vegetal associations, and the forest specialists, who would benefit from a “living herbarium” and could also study the growth rates of the different trees under the Belgian climate. Mention must be made that the Higher Forestry Board insisted that the Museum should not be too “botanic”³⁶, that is to say, not too purely scientific.

The collections of the Museum of Forestry were again twofold:

On the one hand, there were the popularization and technical collections that included samples of different types of wood, statistics on the growth rates, the pro’s and con’s of the different native, or not, species, phytopathological samples, pests, samples of imported woods, trade statistics, common

³² The Congo Free State was created in 1885. It was King Leopold II’s private property. The Belgian Chambers and the Belgian Ministers had no influence on the Secretaries of State that helped Leopold II run his African property. Despite the reluctance of many Belgian politicians, shortly before Leopold II’s death, the Congo became a Belgian colony (1908). (Stengers, 1989, p. 168–178; Witte, Craeybeckx, 1987, p. 141–144).

³³ Rapport de Ch. Bommer. 5/2/1902. AJB. № 186.

³⁴ Annales parlementaires de Belgique. Bruxelles, 1888. P. 647; Conseil Supérieur des Forêts // Bulletin de la Société Centrale Forestière de Belgique. T. 1. 1893–1894. P. 487–493.

³⁵ See, for instance: Hubert to the Minister of Agriculture De Bruyn. 23/4/1898 // Annales parlementaires de Belgique, session législative ordinaire 1897–1898. Chambre des Représentants Bruxelles. 1898. P. 1225.

³⁶ Séance du Conseil supérieur des Forêts, 27/11/1899 // Bulletin de la Société Centrale Forestière de Belgique. T. 7. Bruxelles, 1900. P. 38.

names, Latin names etc. On the other hand, the scientific collections displayed a forestry herbarium, a collection of woods, and documents related to wood pathology, maps, drawings, pictures etc.

The Museum was inaugurated in 1902. Its practical issues would constantly be brought to the foreground by the director and the board of the State Botanic Garden in the correspondence with the ministry of agriculture. The chairman of the board once said: "Essentially practical, informative, useful to trade, if not more, than to science, the Forestry Museum is a most successful attempt to highlight practical issues in a museum" (Kerchove de Denterghem, 1902, p. 248).

In the wake of the Forestry Museum, some Members of Parliament and the Ministry of Agriculture suggested that a future Museum of Agriculture could join it on the premises of the State Botanic Garden³⁷. This time, Director Théophile Durand (1855–1912) turned them down:³⁸ what would then be left for 'pure science' in the State Botanic Garden, he seemed to ask.

Thirdly, it is important to mention that attention to beauty became more and more important in the eyes of the ministers. While the Botanic Garden battled to get enough money to buy herbaria, or set up a lab, the ministers would instead put money into attracting devices, like rockeries in the greenhouses and the garden itself, installing an Italian garden and so on (Diagre, 2011a, p. 210–211, 218–230).

As for the handful of so-called "experimental fields" that had been laid in some Belgian regions, since the Museum of Forestry, the Arboretum and aesthetic issues had already consumed for the most part the initial impetus of the Great Reform, they were abandoned in 1910³⁹, if not before. In these places, practical science was supposed to prevail over "pure science". One might also suggest they were less eye-catching than museums, greenhouses and flower beds...

Whatever the case, the attempt to transform the Botanic Garden into an institution devoted to practical science and to political propaganda was yet to be complete. In 1908, a new administration was born within the Ministry of Agriculture. It was named the Rural Office⁴⁰. The Office was dedicated to "economic and technical issues relevant to the rural populations". In addition, it would provide information to the administration of agriculture, and must concentrate on "technical research <...> on agriculture and horticulture" such as the "study of soils, climates <...>, action of fertilizers and amendments, seed selection, pest and studies on plant diseases, methods and new cultures etc."⁴¹ Several services were under the Office control, among which the so-called Chemical Station, the State Experimental Fields, the State Entomological Section, the State Section of Phytopathology, some labs... and, as strange as it may sound, the State Botanical Garden!⁴² Once again, popularization and practical issues were key words for the Catholic politicians, and the Botanic Garden paid the price for it.

Conclusions

Sciences, and sometimes even more so for State scientific institutions, are embedded in their epoch and society. They interact, initiating a sort of a dialogue or even, sometimes, a struggle. One might say that they *cross-pollinate*, on occasion. The history of the State Botanic Garden fits quite well in this well acknowledged interpretative framework. *Nihil novi sub sole*, indeed.

³⁷ Documents parlementaires de la Belgique, session législative ordinaire de 1902–1903. Chambre des Représentants. Bruxelles, 1903, séance du 4/2/1903, p. 157.

³⁸ Letter from Th. Durand to the Minister Van der Bruggen, 15/1/1903. AJB. № 170.

³⁹ Letter from Th. Durand to the watchmen of the experimental fields, 23/3/1910. AJB. № 177.

⁴⁰ Bulletin de l'Administration de l'Agriculture. T. 1. Bruxelles. 1908. № 1. P. 121 et 122–125.

⁴¹ La Tribune Horticole: Journal hebdomadaire illustré. Vol. III. Bruxelles, 1908. P. 339.

⁴² Ibid.

The founders of the private Brussels Botanic Garden (1826–1870) were clearly dipped in a mixed stew of liberalism and mercantilism, in a country — the Netherlands, at first — that favored enterprises, companies and trade. As a consequence, the statutes the Botanic Garden company was built on reflected a trend for practical issues and “down-to-earth science”. They hardly paid any attention to so-called “pure science”, like taxonomy or what was sometimes called “philosophical botany”. It was a leading-class botanic garden, founded by and for the local bourgeoisie, supported by the State and the City administration. So it devoted itself to please them and to make money out of plant sales and popularized science, or attractions. Thus, *on the one hand*, the board managed to entertain the local elites with fairs, concerts, and showy popular or para-scientific attractions; *while on the other*, spurred by the Home Office and the Chambers, it pretended to be useful for the whole country by experimenting with seeds, breeding silk worms, laying a botanic museum, growing Salmonids etc., but all in vain. At the end of the day, no single progress in science or industry originated, or was initiated, in the Brussels Botanic Garden. The chimerical bourgeois project of a would-be National Botanic Garden grounded on a company had thus failed.

Also chimerical, or at least too optimistic, were the hopes of the taxonomists who once thought that a State institution would give them free rein to do ‘their thing’, namely plant systematics. The liberal utopia had indeed been eroded by the failures of its own dreamed society and resulting social demands, circumstances, which added to the old struggle between the Liberal and the Catholic Parties. Not to mention the Belgian Socialist Party that will arise in the mid 1880’s. In a nutshell, the Belgian society was changing. This would lead to an extended suffrage in 1893 that, in turn, would impact many aspects of the society.

The rise of a more democratic society raised new problems for the politicians and, as a consequence, for the Botanic Garden. Being more visibly useful, or at least more visible, to the newly enlarged, so-to-speak, Belgian society was becoming, more than ever, a crucial element for the politicians, and thereby for the State Botanic Garden. Not only must it be useful to horticulture and agriculture, schools and universities, or even to industry and medicine, but also to the ministers who in turn depended on voters.

At the end of the 19th century, the ministers had thus managed to secure their grip on the State institution and had begun to exploit it for the promotion of the Catholic political values and activities. Consequently, the taxonomists of the Botanic Garden, while they dreamed of the thrill of pure scientific research, were enlisted to give speeches of popularized sciences, and applied sciences, like horticulture. The scientific board itself was injected with experts in horticulture and forestry. Popularized forestry and botany for schools and laymen had become key projects for the Catholic ministers of agriculture who wanted to pamper the ones who embodied resistance to urban socialism and liberalism: landowners, farmers and all those who earned a living from woods, horticulture and plowing. Even aesthetics tended to gain predominance in the garden, as a means of publicizing to people what was happening in the Botanic Garden of the Catholic Ministry of Agriculture. In February 1903, a Catholic Member of the Chamber was crystal clear by saying that the State Botanic Garden was now “resolutely involved in practical popularization”. According to the Central Section of the Chamber, he said, the Botanic Garden was ideally situated to be “visited by the people from the country” and the Government should do its best “to attract as many people as possible (in the institution) with lectures on practical topics”⁴³.

⁴³ Documents parlementaires de la Belgique, session législative ordinaire de 1902–1903. Chambre des Représentants. Bruxelles, 1903, séance du 4/2/1903. Rapport de la Section centrale sur le projet de budget pour le ministère de l’Agriculture en 1903, p. 157, by Raemdonck.

The questions arose, more than once: What did a botanic garden, whose role-model was its idealized big English counterpart, have to do with the Ministry of Agriculture, after all? Why else had it been grafted to such an administration but for applied science purposes and the promotion of the Catholic Government?

In fact, the “graft” did not make sense to some Liberal politicians and to the botanists of the Botanic Garden. All in all, the Arboretum, the two-folded Museums with a deep tint of popularized science and practical issues showed that dreams of “pure science” were threatened by ... growing democracy and its demands. This meant that the dreams of intellectual elites had to cope with the arousal of a widened public opinion. It showed clearly, though implicitly, in 1905, when Director Durand dared to recall to the Minister of Agriculture’s mind — who apparently had a tendency to forget it — that at the Botanic Garden⁴⁴ science must come before popularization.

Yet, imperialism and autocracy lent a helping hand to those scientific elites and eased them out of the rut they were stuck in. The Royal private property in Congo, which in 1908 became a Belgian colony, was flooding the Brussels herbarium with thousands of dried plants. It gave some State botanists the opportunity and the right to make a name for themselves, and it gave the Belgian Botanic Garden a role to play on the international scientific scene. The State botanists began to write thousands of pages about tropical floristics and taxonomy, seasoned with hundred of articles related to colonial agriculture (Diagre, 2011, p. 182–184, 239–248 i.a.) under the protection of Leopold II and against the ill will of the Belgian ministers and the majority in Parliament.

Unfortunately for the botanists of the Botanic Garden, not only were they undermined by the Belgian politicians and their courtship toward the voters, but also by the universities whose salient botanists had been pushed by the Catholic ministers onto the scientific board to counter-balance the power of the Liberal University of Brussels (Diagre, 2006). In 1909, those academics managed to change the statutes of the national institution. Far from being a rejuvenation, this move rather put the State institution at the orders of the departments of botany of the Belgian universities⁴⁵. From then on, supporting the universities through data supply and well-kept book and plant collections would become the first priority at the State Botanic Garden. During the discussions on the board that resulted in the “scientific castration” of the State Botanic Garden, someone also pronounced a word that had never appeared before in the archive of the institution: “taxpayers”. Professor Auguste Gravis (1857–1937), at this occasion, suggested that the “taxpayers” should not pay for the dry descriptive studies that were done by the State institution⁴⁶.

Democratization of the Belgian society and its requirements in terms of visibility and return, among other factors — which included the local philosophical struggle between Catholics and the Liberals/Free Thinkers, Belgian Imperialism, competition with universities — all played a role in the way science was made, and was to be made, at the Brussels Botanic Garden. From the early 19th century through the time of the “Belgique libérale et bourgeoise” (*Gubin, Nandrin*, 2005), to the time when the Socialist Party began to play a role in the Parliament⁴⁷, the Botanic Garden was fashioned, or even fashioned itself, to favor the values and expecta-

⁴⁴ Letter from Th. Durand to the Ministry of Agriculture (February 1905?). AJB. № 171.

⁴⁵ The new statutes of the Botanic Garden were fashioned in 1907 and approved by the King in 1909. The discussions showed that most academic members of the board wanted the Botanic Garden to support the research programs of the Belgian universities with the State collections. This meant that systematics and floristics were supposed to come second to educational programs existing elsewhere in Belgium. All but one professor supported that point of view. See: Minutes of the Supervisory Board, 14/03/1907 and 03/06/1909. AJB. № 4.

⁴⁶ Minutes of the Supervisory Board. 14/03/1907. AJB. № 4.

⁴⁷ The Parti Ouvrier Belge (POB) was founded in 1885 and its first representatives in the Chamber were elected in 1894 (see: Van Eenoo, 2003. P. 59–61).

tions of a growing number of people. As a result, though most State botanists dreamed of pure, somewhat ethereal science, the institution had to dedicate itself to applied research, popularization of knowledge and aesthetics. Belgian imperialism in Congo only gave it the opportunity to pursue research in phytogeography and systematics of Tropical plants.

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Чистая наука или наука практическая: трудный выбор Брюссельского ботанического сада (1826–1914)

ДЕНИС ДИАГРЕ-ВАНДЕРПЕЛЕН

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Цели ботанических садов менялись во времени и пространстве: от их предшественников — аптекарских огородов в итальянских университетах до современных многоцелевых учреждений. История Брюссельского ботанического сада, созданного в 1826 г. в качестве частной компании, показывает, что первоначально его цели определялись правящей элитой и её потребностями: сад должен был сосредоточиться на сельскохозяйственном и промышленном развитии страны... и на продаже предметов роскоши. Позже, став в 1870 г. государственным учреждением, и до Первой мировой войны, Ботаническому саду приходилось иметь дело не только с диверсификацией дисциплин и новых тенденций в науке, но и с ростом влияния общественного мнения. В таком контексте мечтам о «чистых» исследованиях (в области систематики или флористики) приходилось сталкиваться с практическими и политическими вопросами, связанными с растущим общественными требованиями и решениями избирателей.

Ключевые слова: ботанический сад, Бельгия, политика, популяризация, Ботанический музей, Музей лесного хозяйства, рыбоводство, шелководство, дендрарий, колонии, садоводство, таксономия, аквариум, либерализм, католицизм, меркантилизм, эксперимент.