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Camellia japonica dresdensis: Exotic Plants as Global Goods in Central Europe in the First Half of the Nineteenth Century

In 1830, the gardener and nurseryman Jacob Friedrich Seidel (1789–1860) published a short article in the journal *Verhandlungen des Vereins zur Beförderung des Gartenbaues in den Königlich Preussischen Staaten* (Proceedings of the Society for the Improvement of Horticulture in the Royal Prussian States). In the text, Seidel informed his readers about the cultivation of the "exceedingly popular camellia japonica," a plant that "as its name already shows, is originally native to Japan."[1] According to Seidel, fifty varieties or cultivars of the camellia were then known in Europe. Some of them had come directly from East Asia, but for some time now, Seidel elaborated, English breeders had successfully managed to hybridize camellias, foremost among them Alfred Chandler. In the previous two years alone, Chandler had created nine new varieties, one of them named "chandleri" after its creator. The remainder of Seidel's text is devoted to detailed information on the cultivation of camelias, including the right kind of soil, the temperature range tolerated by the plant, advice on watering potted camellias, as well as detailed information on their propagation. While according to Seidel the English "received bags full of seeds from its [the camellia's] fatherland" and used those for propagation, in Germany breeders had to rely on propagation by cuttings or offshoots.[2] Consequently, Seidel proceeded to give detailed information on the safest method of propagation with cuttings, taking his readers through the timescale of the operation as well as providing practical advice, such as the best way to achieve a good cutting or the most favourable mix of soil. All in all, he demonstrated a high level of competence and experience — a fact which also appears to have been recognized by his readers, as Seidel's text was reprinted in another horticultural journal shortly afterwards.[3]

[1] "Die so beliebte Camellia japonica ist, wie schon ihr Name zeigt, ursprünglich in Japan zu Hause." Jacob Friedrich Seidel, "Ueber die Kultur der Camellien," *Verhandlungen des Vereins zur Beförderung des Gartenbaues in den Königlich Preussischen Staaten* 6 (1830): 35. The *camellia japonica* actually originates from China.
[2] "In England, wo man ganz Säcke Samen aus ihrem Vaterland bekommt, zieht man sie meistens daraus, und veredelt diese durch Samen erzeugten Wildlinge alsdann mit den Zweigen und Reisern der guten Sorten." Seidel, "Ueber die Kultur der Camellien": 37–38.
[3] Jacob Friedrich Seidel, "Ueber die Kultur der Camellien," *Allgemeine Deutsche Gartenzeitung* 9 (1831): 388–91.

At the time this article was published, Jacob Seidel had been cultivating camellias professionally for almost two decades. He came from a family of gardeners: his father and grandfather had served as royal gardeners at the court of Dresden, and Jacob and three of his brothers trained and worked as gardeners while two of their sisters married nurserymen. After some training in Dresden, Jacob had spent two years in Paris during the height of Napoleon's power. In the French capital, Seidel earned his keep as "garçon jardinier" in the municipal nursery at Parc Monceau and attended classes on the cultivation and acclimatization of foreign flora at the *Muséum d'Histoire Naturelle*.[4] After his return to Dresden in 1813, he founded his own nursery, where he cultivated flower bulbs, roses, fruit trees, berry bushes, and vegetables. His elder brother, Traugott Leberecht Seidel (1775–1858), was at that time already selling exotic plants such as Peruvian potatoes, Chinese tree seeds and Indian coconuts, as well as azaleas and six varieties of *camellia japonica*.[5] Shortly afterwards, the two brothers joined forces for some years until Traugott Seidel relocated to Vienna in 1826, where he had received his training.[6] Before Traugott's move, however, Jacob had found the time to make a trip to England in 1822. It seems safe to assume that during this trip Jacob had made some hands-on experience with the English art of growing and breeding camellias. And he may even have bought some of the "bags full of seeds" available there. In June 1827, a prominent visitor to Jacob Seidel's nursery, Duke Carl-August of Saxe-Weimar, was certainly most impressed by the "forest of camellias" he had seen there, and berated his own gardener for the latter's lack of competence and lamenting the deficiency of the ducal garden.[7] Indeed, Seidel knew how to grow camellias: by 1834 he had sufficient stock to deliver 5,000 camellias in a single shipment to customers in St. Petersburg.[8] In addition to the Russian Empire, during the 1830s Seidel sent his camellias to customers in the German lands, Austria, Hungary, Poland, and along the coast of the Black Sea. In short, within a surprisingly short amount of time, Seidel had become a prime supplier of formerly exotic plants to a wide region, bringing together Asia, the British Empire, and Central Europe.

The business of Jacob Seidel and his successors—the company is still in existence today—can thus serve as a starting point for exploring the intricate ways by which Europeans in regions

[4] Manfred Riedel, "Im Dienst der Flora: 200 Jahre Erwerbszierpflanzenbau in Deutschland 1813–2013," in *200 Jahre Zierpflanzenbau in Sachsen*, ed. Sächsisches Landesamt für Umwelt, Landwirtschaft und Geologie (Pirna: Laske-Druck, 2013): 18.
[5] Mustafa Haikal, *Der Kamelienwald: Die Geschichte einer deutschen Gärtnerei* (Berlin: Aufbau, 2001): 49.
[6] Almost instantly, Traugott Leberecht Seidel's nursery in Vienna became known as a prime location for camellias. See *Allgemeine Deutsche Gartenzeitung* 4 (1826): 156–58.
[7] Haikal, *Kamelienwald*: 66–67.
[8] Haikal, *Kamelienwald*: 71.

outside the traditional colonial powers participated in and benefited from European expansionism and imperialism.[9] Taking the Dresden nurseries and their far-flung commercial and personal networks as a case study, this paper wants to shed light on domestic horticulture in the European metropole. By analyzing gardening catalogues and the popular gardening press, it traces how East Asian shrubs became a staple in Central European horticulture even before formal participation in European imperial expansion, and how exotic plants were domesticated in every meaning of the word. By looking at hitherto little-regarded consumer practices in Central Europe, this chapter thus contributes to an integrated economic history of European imperialism and the many dependencies it created. To do so, in what follows I will focus, firstly, on the exploration of unknown plants as part of an imperial agenda and the role of botanical gardens as "tools of empire."[10] This theme is continued, secondly, by highlighting the practice of European plant hunting in Asia and the introduction of new species to Europe. The last section is dedicated to the case study of Jacob Seidel and his nursery in Dresden which has a so far received little scholarly attention.

1 Exotic Plants and Imperial Ambitions

Exploring unknown parts of the world and collecting natural specimens of foreign origin were part of the Enlightenment mindset, which included a desire not only to better understand the world but also to "improve" it, where this was felt to be necessary or possible. As such, the study of previously unknown flora served not merely aesthetic or horticultural concerns, but also contributed to far more utilitarian ends. Indeed, it has been argued that the collection and study of plants were intimately tied to schemes of imperialism and colonialism. Collecting and studying plants provided practical information that could ensure colonists' survival, helped to identify valuable crops, and uncovered hitherto unknown resources to western colonists, for example for medicinal purposes. As Londa Schiebinger and others have demonstrated, scientific voyagers often enough became bioprospectors, who were eager not

[9] This is, of course, a key strand of research in Klaus Weber's work, see his "Mitteleuropa und der transatlantische Sklavenhandel: Eine lange Geschichte," *Werkstatt Geschichte* 66–67 (2014): 7–30; Klaus Weber, "Atlantic Commerce and the Rise of Central European Rural Industry," in *The Sea in History. The Early Modern World / La Mer dans L'histoire*, ed. Christian Buchet and Gérard Le Bouëdec (Woodbridge: Boydell & Brewer, 2017): 66–77; Jutta Wimmler and Klaus Weber, ed. *Globalized Peripheries: Central Europe and the Atlantic World, 1680–1860* (Woodbridge: Boydell & Brewer, 2020).

[10] Daniel R. Headrick, *The Tools of Empire: Technology and European Imperialism in the Nineteenth Century* (New York: Oxford University Press, 1981).

only to find new and useful plants but also did not shy away from exploiting Indigenous knowledge when it came to the plants' uses.[11]

The constant influx of new plants to European centers of knowledge also provided the opportunity to systematize natural history and to understand God's creation of the world. At the time, scientists still believed that this divine plan could be understood if only sufficient information was gathered. But Enlightenment scholars also held the view that it was possible to improve the natural world, for example by transferring plants from one part of the world to another. After all, it was man's mission to assist in God's creation, a belief which also rendered colonial conquests beneficial and legitimate.[12] In this complex process, botany with its massive collection of data and specimens was considered a leading discipline. Consequently, British Royal Navy ships took along a natural scientist on most exploratory voyages to assist in stocktaking and the subsequent classification of natural resources, while the French sent out exploratory expeditions like the one headed by the navy officer Jean-Francois de Galaup, comte de Lapérouse (1741–1788).[13]

In order to organize this wealth of knowledge, more and more botanical gardens were founded or expanded. The first such gardens at the universities of Padua, Florence, and Leiden, served as "physick gardens" and provided medicinal plants for medical students and practitioners. The plants were valued for their healing qualities and catalogued accordingly. From the sixteenth century onward, however, botanical gardens also sought to expand their collections according to territorial criteria and to include as many known plants as possible.[14] Bringing them together in one place allowed comparing the many different forms of plants, their colors, scents, and idiosyncrasies such as thorns and bristles, as well as their seasonal development. The sharing and transmitting of knowledge gained by empirical observation became more and more important. Detailed descriptions with standard turns and phrases as well as botanical

[11] Londa Schiebinger, *Plants and Empire: Bioprospecting in the Atlantic World* (Cambridge, MA: Harvard University Press, 2004); Londa Schiebinger and Claudia Swan, ed., *Colonial Botany, Science, Commerce and Politics in the Early Modern World* (Philadelphia: University of Pennsylvania Press, 2005); David Philip Miller and Peter Hanns Reill, ed., *Visions of Empire: Voyages, Botany, and the Representations of Nature* (Cambridge: Cambridge University Press, 1996).

[12] Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism 1600–1860* (Cambridge: Cambridge University Press, 1995); Richard Drayton, *Nature's Government: Science, Imperial Britain and the "Improvement" of the World* (New Haven: Yale University Press, 2000).

[13] Julia Angster, *Erdbeeren und Piraten: Die Royal Navy und die Ordnung der Welt 1770–1860* (Göttingen: Vandenhoeck & Ruprecht, 2012): 145–68; Roger L. Williams, *French Botany in the Enlightenment: The Ill-Fated Voyages of La Pérouse and His Rescuers* (Dordrecht: Kluwer Academic, 2001). Incidentally, the German naturalists Reinhold and Georg Forster participated in these exploratory voyages.

[14] Marianne Klemun, "The Botanical Garden," Europäische Geschichte Online (EGO), Leibniz-Institut für Europäische Geschichte (IEG), 22.06.2015, http://www.ieg-ego.eu/klemunm-2015-en [accessed 08.07.2024].

drawings were circulated among botanists throughout Europe, all of which contributed to making the study of plants a science in its own right, as well as a highly collaborative project.[15]

The expansion of botanical knowledge depended not only on collaboration within the European Republic of Letters, but also on the establishment of a botanical network that went beyond Europe—the botanical gardens in Leiden, among the most important in early modern Europe, owed their spectacular collection in a large part to the Dutch East India Company, the V*ereenigde Oostindische Compagnie* (VOC) and the many riches, botanical and otherwise, the company's ships brought back from Asia. In Great Britain, the captains of East Indiamen were just as instrumental in introducing new plants into the collections of botanical gardens and private plant enthusiasts alike.[16] Of particular importance was also the establishment of botanical gardens in the colonies; these institutions not only helped in collecting and storing plants but also in transferring them from one part of the world to another. Scientific and economic interests very often went hand in hand—the Dutch established a botanical garden at the Cape of Good Hope which was also intended to supply provisions to the *VOC* ships on their way to Asia; and the Pamplemousses Botanic Garden in Mauritius, founded by the French in 1735, was instrumental in breaking the Dutch monopoly on cloves and nutmeg by making it possible to transfer these plants to French possessions in the Caribbean.[17] By the nineteenth century, the British in particular had managed to build up an extensive network; at its height, the British Empire had 115 botanical gardens, almost a third of all such institutions worldwide.[18]

At the center of this extraordinary network of botanical institutions sat Kew Gardens in London, the most famous and most important botanical institution not only within the British Empire but worldwide.[19] It possessed the most extensive collection of both living and dried plants and was therefore leading in the field of taxonomy, that is the classification and scientific description of plants, which was at the time considered to be the core of botanical research. As a botanical garden, Kew had only been established in 1841, but it was generously

[15] Bettina Dietz, *Das System der Natur: Die kollaborative Wissenskultur der Botanik im 18. Jahrhundert* (Köln: Böhlau, 2017).
[16] Emil Bretschneider, *History of European Botanical Discoveries in China* (London: Sampson Low, 1898): 215–23; Sarah Easterby-Smith, *Cultivating Commerce: Cultures of Botany in Britain and France, 1760–1815* (Cambridge: Cambridge University Press, 2018): 147–73.
[17] Grove, *Green Imperialism*: 168–79.
[18] Worldwide, there were 378 botanical gardens at the turn of the twentieth century, half of them in Europe. Donald McCracken, *Gardens of Empire: Botanical Institutions of the Victorian British Empire* (London: Leicester University Press, 1997): 19.
[19] Ray Desmond, *Kew: The History of the Royal Botanic Gardens* (London: Harvill Books, 1998).

funded and it could draw on the expertise and collections amassed by forerunner institutions which had been administered, among others, by Joseph Banks (1743–1820). Banks had earned his spurs by taking part in a natural history expedition to Newfoundland and Labrador, and in the first of Captain Cook's voyages (1768–1771) which visited Brazil, Tahiti, New Zealand, and Australia, returning to great fame. Making use of his considerable personal fortune and social standing, Banks became the pivotal figure of natural history in Britain in the late eighteenth and early nineteenth centuries, and an important enabler of both scientific and imperial projects.[20] Taking up the Banksian legacy, William Jackson Hooker (1785–1865), professor of botany at the University of Glasgow, was nominated as Kew's first director. He used his office to train young talent and to considerably extend the garden's collection of dried and living plants by sending out plant collectors and agents, among them his son, Joseph Dalton Hooker (1817–1911), who later succeeded him as director upon his death. Under the latter and even more so under the directorship of William Turner Thiselton-Dyer (1885–1905), Kew Gardens fulfilled its purpose as imperial clearing house most comprehensively. Questions of economic botany became increasingly important, which included the identification and improvement of crops suitable for plantation economies, the transfer of plants across the British Empire, and the publication of numerous treatises on agricultural questions.[21] It was this role as service institution to the Empire which made Kew Gardens a role model for the establishment of the *Botanische Zentralstelle für die Kolonien* (Botanical Center for the Colonies) at the Berlin botanical gardens in 1891, an institution that had been expressly established to advance the prospects of Germany's colonial empire.[22] There is therefore no doubt that botanical gardens served as important "tools of empire."[23] However, the focus on "green imperialism" and the role of botanical gardens in the transfer and acclimatization of plants, introduction of plantation economics, and dire consequences to indigenous life and the environment in general has somewhat obscured the fact that botanical gardens were just as much about collecting and cultivating plants that were not cash crops. While it was easiest to get public money for economically viable initiatives, the staff at

[20] John Gascoigne, *Science in the Service of Empire: Joseph Banks, the British State and the Uses of Science in the Age of Revolution* (Cambridge: Cambridge University Press, 1998); Simon Werrett, ed., *Rethinking Joseph Banks*, Special Issue *Notes and Records* 73, no. 4 (2019): 425–526.
[21] A seminal work on this topic is Lucile H. Brockway, *Science and Colonial Expansion: The Role of the British Royal Botanic Gardens* (New Haven: Yale University Press, 2002 [1st ed. 1979]). For a critical revision of Brockway's extensive claims see McCracken, *Gardens of Empire*: Chapter 5; Grove, *Green Imperialism*.
[22] Katja Kaiser, *Wirtschaft, Wissenschaft und Weltgeltung: Die Botanische Zentralstelle für die deutschen Kolonien am Botanischen Garten und Museum Berlin, 1891–1920* (Frankfurt a.M.: Peter Lang, 2021).
[23] Daniel Headrick, *The Tentacles of Progress: Technological Transfer in the Age of Imperialism, 1850–1940* (Oxford: Oxford University Press, 1988): 209–58; Drayton, *Nature's Government*.

botanical gardens such as Kew and its satellites in the British Empire, at the *Jardin des Plantes* in Paris, or the Schönbrunn gardens in Vienna were certainly just as interested in ornamental plants as they were in crops, if not more so. After all, as scientific institutions they were engaged in classifying and systematizing the world's plants in their entirety. Breeding plants for agricultural purposes was rather a byline to their botanical work. However, as Sarah Easterby-Smith pointed out, scientific interest and imperial affirmation went hand in hand as "substantial national collections of rare and lucrative plants, further, served a symbolic role as projections of imperial power."[24] The ever-growing collections of tropical and subtropical plants cultivated in extensive greenhouses—which thanks to their steel and glass architecture represented technological progress in themselves and evoked ideas of imperial grandeur—were most definitely a case in point of colonial ambitions and expansionist fantasies. This direct relation was prominently acknowledged by the director of the Botanical Gardens in Berlin, Alfred Engler (1844–1930). Visitors coming to the Gardens' spectacular glasshouse, which was filled with palm trees that grew to the ceiling, lianas and other climbing plants as well as fragrant flowers, were meant to immerse themselves with all their senses so as to imagine themselves within the tropical forests of "their" colony.[25] In short, the consumption of new ornamental plants was intricately tied to imperial projects. This connection becomes even more obvious when we look at the collection of plants in the field, both by academically trained plant hunters with more scientific interests as well as gardeners sent out by commercial nurseries for monetary gains.

2 Plants and Networks: Hunting for Horticultural Treasure in China

In 1804, Joseph Banks and six other plant enthusiasts founded the Horticultural Society of London. In keeping with the spirit of the Enlightenment, this learned society was dedicated to the improvement and practice of horticulture, bringing together academics, enthusiasts, professional gardeners, and nurserymen. At regular meetings they discoursed freely about practical and theoretical knowledge and exchanged rare plants and seeds for their respective gardens. The Horticultural Society almost immediately became an important player in the world of horticulture and botany on a more general level, too, as it soon began to commission plant collectors to bring back plants and seeds from around the world for cultivation and

[24] Easterby-Smith, *Cultivating Commerce*: 147.
[25] Katja Kaiser, "Exploration and Exploitation: German Colonial Botany at the Botanic Garden and Botanical Museum Berlin," in *Sites of Imperial Memory: Commemorating Colonial Rule in the Nineteenth and Twentieth Centuries*, ed. Dominik Geppert and Frank Lorenz Müller (Manchester: Manchester University Press, 2015): 229–31.

study.[26] From 1821 onward and for the next thirty years, the Society financed plant collecting on every continent except Australia.[27]

Plants from China and Japan were particularly sought after, both by the Society's members and by commercial nurserymen, as they were almost impossible to be had due to trade restrictions and the wide distances that had to be covered. Both countries kept their borders closed to Europeans. China only allowed traders to stay in the port of Canton, while Japan permitted any exchange only via the Dutch enclave on the minuscule island of Deshima in the bay of Nagasaki. Despite the botanical riches they promised, plant collecting in both countries was severely limited and only very few plants from China or Japan reached Europe in the eighteenth and early nineteenth centuries. Among European horticulturalists, however, British garden enthusiasts and nurserymen benefited from the wide-ranging expansion of Britain's influence via commercial and financial interventions, most notably the trade relations built up by the East India Company (EIC).

Throughout the eighteenth century, the EIC maintained a constant flow of ships to and from Asia, bringing back not only spices, tea, and porcelain, but also seeds and plants. Thanks to the existence of commercial nurseries in Canton, getting hold of such plants in China was actually no great difficulty once one was there. However, transporting them back to England was a far more difficult matter and in England, Chinese plants were considered horticultural treasures, and it required good connections to get hold of them. Their rarity, associated costliness, and their often high maintenance requirements made camellias, chrysanthemums or peonies exclusive objects for wealthy garden lovers who could afford the premium prices, possessed the necessary greenhouses, and had professional gardeners at their disposal. A case in point are the well-known floriculturalists Amelia (1751–1809) and Abraham (1749–1838) Hume, who received several types of chrysanthemums and peonies for their estate Wormleybury in Hertfordshire thanks to efforts of the EIC captains James Pendergrass and George Welstead. Abraham Hume was a member of the Royal Society and a Member of Parliament.[28] Thomas Evans, yet another wealthy garden lover, also entertained good relations with "India House" and received several types of begonia and chrysanthemums via EIC captains.[29] Official missions to the rulers of China and Japan, who were based in their countries' interiors, provided further opportunity for (illicit) plant collecting. Clarke Abel, for

[26] Brent Elliott, *The Royal Horticultural Society: A History, 1804–2004* (Chichester: Phillimore, 2004): 1–12.
[27] Brent Elliott, "The Cultural Heritage Collections of the RHS Lindley Library," *Occasional Papers from the RHS Lindley Library* 1 (2009): 23–24.
[28] Bretschneider, *History of European Botanical Discoveries*: 211–13.
[29] Bretschneider, *History of European Botanical Discoveries*: 215–16.

example, the Chief Medical Officer who accompanied the British ambassador Lord Amherst to the Chinese court in 1816, gathered a large number of plants, mostly taking what he found en route. His efforts were of no avail, however, as the entire collection of plants was lost in a shipwreck. The German physician Philipp Franz von Siebold (1796–1866), who was a member of the Dutch trading post at Deshima, was somewhat luckier. Although he was convicted of high treason and expelled from Japan, he managed to take eighty plants to Leiden in the Netherlands with him, which then formed the basis of his nursery of exotic plants there.[30] All in all, the policies of Asian rulers and European commercial interests largely determined where and how botanists could acquire new knowledge and plant specimens well into the nineteenth century.

To overcome these limitations, institutions like the Horticultural Society, but also private nursery firms, sent out specialized plant hunters who usually possessed training in gardening and sometimes also in botany and taxonomy. It was no accident that the Society's first plant hunting missions went to China, following the maritime routes established by global trading interests.[31] These had after all also brought John Reeves (1774–1856) to Canton, the plant enthusiast and eager corresponding member of the Society, who had been working there as a tea inspector for the EIC since 1812. He was not only responsible for introducing the *Wisteria sinensis* and numerous other gardening treasures to England, but also fueled his compatriots' desire for Asian shrubs and bushes by commissioning more than 900 colored drawings that depicted Chinese flora. The drawings, now held in the Lindley Library in London, were carefully executed by a range of Chinese artists whom Reeves had instructed in this new style of painting and unaccustomed way of seeing.[32] Reeves also welcomed the Horticultural Society's plant hunters. These included John Potts, who came to Canton, Macao, and Bengal in 1821, and John Parks, who traveled to China, Macao, and Java from 1823 to 1824, and thus turned into an important figure and facilitator for the global plant trade. Both Potts and Parks collected, among other horticultural assets, a wide range of azaleas and chrysanthemums and themselves oversaw the plants's transport to Europe, at least in part. By this extra effort, Potts

[30] Ambra Edwards, *The Plant Hunter's Atlas: A World Tour of Botanical Adventures, Chance Discoveries and Strange Specimens* (London: Greenfinch, 2021): 72–76.
[31] Easterby-Smith, *Cultivating Commerce*: 157–59.
[32] These drawings are, of course, also testament to the contribution of non-western scholars and artists to the emergence of European science. Iris Schröder, "Disziplinen: Zum Wandel der Wissensordnungen im 19. Jahrhundert. Einführung," in *Von Käfern, Märtken und Menschen: Kolonialismus und Wissen in der Moderne*, ed. Rebekka Habermas and Alexandra Przyrembel (Göttingen: Vandenhoeck & Ruprecht, 2013): 147–61; Kate Bailey, *John Reeves: Pioneering Collector of Chinese Plants and Botanical Art* (Woodbridge: ACC Art Books, 2019); Fa-Ti Fan, *British Naturalists in Qing China: Science, Empire, and Cultural Encounter* (Cambridge: Harvard University Press, 2004): 43–57; Kärin Nickelsen, *Draughtsmen, Botanists and Nature: The Construction of Eighteenth-Century Botanical Illustrations* (Berlin: Springer, 2006).

and Parks increased the rate of the plants's survival by several degrees. John Livingstone, head physician to the EIC in Canton and friend of John Reeves, estimated that for each plant that survived the voyage to England, one thousand were lost, raising the price of the surviving plants to dizzying heights and making them important objects of conspicuous consumption.[33] John Potts, the first plant hunter sent out by the Horticultural Society, had been working as a gardener in the Society's garden in Kensington in 1818 when he was asked to travel to China in 1821. Like all plant collectors financed by the Horticultural Society, Potts was asked to keep a diary, which has survived in the Lindley Library in London and which allows us to follow this plant hunter's footsteps.[34] What becomes clear from the diary is the fact that plant collectors like Potts could rely on an extensive European infrastructure in East Asia which very much furthered their prospects. Right at the beginning of his trip, Potts visited the Botanic Garden in Calcutta (now the Acharya Jagadish Chandra Bose Indian Botanic Garden), which had been established in 1787 to introduce and acclimatize exotic plants for dissemination across the EIC's possessions.[35] Here, Potts was given a room and provided with "every needful attendance in the gardens."[36] During his time in India, Potts also struck up an acquaintance with the missionary and anthropologist Dr William Carey, who had cultivated an impressive garden at Serampore in West Bengal. Both at Dr Carey's and at the Botanic Garden, Potts compiled long lists of plants that might suit the Horticultural Society. He also collected interesting specimens from the beach and the jungle for his employers. After five weeks of intensive collecting, he boxed up his finds with the assistance of the staff at the Botanic Garden who supplied him, notably, with quantities of moss to pack the plants safely and tightly into their boxes.[37] Thanks to the regular shipping service between Bengal and London, Potts could place his plants on a number of EIC ships, heightening their chance of survival. At his stops on Pulo Penang (Prince of Wales Island, Malaysia) and in Singapore, he could again rely on the help of the British governor and other elite British citizens who

[33] John Livingstone, "Observations on the Difficulties which have existed in the Transportation of Plants from China to England and Suggestions for obviating them," *Transactions of the Horticultural Society* 3 (1822): 427.
[34] There are, in fact, two diaries, a "rough" and a "fair" version. Royal Horticulture Society (RHS)/Col/1/1/1; RHS/Col/1/1/2. Both booklets were digitized and can be found at https://collections.rhs.org.uk (last accessed 25.07.2024). I draw on the "rough diary" as it is more detailed. So far, I have not been able to find further information on Potts. He died shortly after his return to England in October 1822. During his travels to East Asia, he suffered several attacks of fever and, as he noted in his diary, was ill for many days. For a notice of his death, see *Transactions of the Horticultural Society* 5 (1824): Preface.
[35] Richard Axelby, "Calcutta Botanic Garden and the Colonial Re-Ordering of the Indian Environment," *Archives of Natural History* 35, no. 1 (2008): 150–63; Grove, *Green Imperialism*: 332–48.
[36] RHS/Col/1/1/1, fol. 4.
[37] The Wardian Case, which later revolutionized the transport of plants, had not been invented yet. See Luke Keogh, *The Wardian Case: How a Simple Box Moved Plants and Changed the World* (Chicago: Chicago University Press, 2020).

assured him that they would be "very glad to forward anything which might be useful to the Horticultural Society."[38] Most of the plants available from these more accessible places were, however, already "plentiful in England" and thus not very desirable from either a scientific or horticultural point of view.[39]

It was rather the autochthonous Chinese gardening culture which held the greatest promise for Potts and his employers. At Canton, members of the rich Hong merchant community cultivated extensive gardens which housed plants native to the Canton area as well as more exotic ones such as the moutan peony.[40] Thanks to the good connections of John Reeves, who took him under his wing upon arrival, John Potts was invited to visit several of these private gardens which made a strong impression on him. In his descriptions, he highlighted both the architectural features that gave the gardens the appearance of a grotto, as well as the thousands of pots containing chrysanthemums, calycanthus, camellias and nelumbiums. Reeves also accompanied Potts to the commercial Fa-tee nurseries, where foreigners were allowed to shop to their heart's content for Chinese plants, and introduced him to the Chinese gardener of Thomas Beale, a compatriot.[41] The latter even went plant hunting for Potts, who could not venture beyond the Canton district, and provided Potts with some insights into Chinese gardening techniques. As Joseph Banks and other members of the Horticultural Society were most eager to learn about Chinese horticulture, this proved very helpful to Potts. He recorded diligently in his journal that the Chinese were very particular when it came to the season of grafting, and how a piece of clay was placed around the lower end of a cutting as though it had roots.[42] In general, however, he was not impressed by the Chinese treatment of plants, but found them rough and awkward in their handling, and wondered that so little effort was spent on propagating plants. Despite employing Chinese gardeners, Reeves and Beale for their part were also happy to accept Potts's help with their ornamental plants—during his stay, he grafted and tied their camellias and planted vines for Reeves, making use of the horticultural skills he had acquired back in Britain when dealing with these delicate plants from afar. As Fa-Ti Fan has pointed out in his study on British naturalists in China, the encounter between British and Chinese horticulturalists was laced with skepticism and a mutual feeling of superiority, a fact that held true both for practitioners and theoreticians.[43]

[38] RHS/Col/1/1/1, fol. 69r.
[39] Ibid., fol. 69v.
[40] Fan, *British Naturalists:* 31–36.
[41] RHS/Col/1/1/1, fol. 72v.; Fan, *British Naturalists*: 25.
[42] RHS/Col/1/1/1, fol. 74.
[43] Fan, *British Naturalists*: 25–26.

Contrary to the relative ease with which camellias, azaleas, chrysanthemums, and other kinds of flowering brushes could be had—Potts even shopped for them with an exact list in hand that had been drawn up by the Horticultural Society's secretary John Sabine after consultation of Reeves' drawings—, getting them back to England was still a major undertaking. Sending home "bagsful of seeds" was not really an option, despite what Jacob Seidel claimed to have seen during his sojourn in Britain. Depending on their natural qualities, seeds could be extremely difficult to collect, germinating them required exact knowledge of the right amount of humidity, warmth and light (all of which had to be avoided during the journey and thus required very circumspect packing), and there was always the chance of hybrids or malformed plants among the seeds. Seeds were also high up on the bill of fare among the ships' nonhuman passengers—instead of making their way to England, they would end up in the stomachs of chickens, mice and rats during the passage. In short, shipping live plants was generally held to be the more successful option. Accordingly, Potts spent a considerable amount of his time in Canton sowing seeds collected in Bengal and Canton, potting and repotting them, planting cuttings of both camellias and chrysanthemums, and aerating the plants already in their boxes.[44]

By his diligence, Potts prepared enough plants to send to Europe several shipments, thereby increasing their chances of survival. In the end, quite a few species were lost, due to shipwreck if not simple negligence. But Potts also followed his orders to the letter and oversaw the voyage of his finds himself. As he noted in his diary, however, there was little that even an experienced gardener like himself could do to protect the plants against the impositions of climate and weather: "At sea, the plants keep in good health until we arrived at the straights of Gaspar [Gaspar Strait]; here the azaleas begin to droop their leaves although kept moist below [deck], several loose [sic] many leaves before we clear the straits of Sunda." At the Cape of Good Hope, gales kept coming at the ship for four weeks, causing many of the healthy plants to die as they had to be confined in darkness.[45] At Saint Helena, Potts gladly took up the offer to air his plants and to place the most sickly ones with the EIC's gardener there, James Cameron, who promised to nurse them back to health. Throughout his passage, Potts—and his plants—thus profited from the extensive global infrastructure the British had built up in the past, highlighting the advantages this entailed also for the world of horticulture. However, Potts's detailed record also makes abundantly clear that while the British were successful in satisfying their horticultural desires and wants in China, there was little question

[44] RHS/Col/1/1/1. See entries between 24 Nov 1821 to 23 Dec 1821.
[45] RHS/Col/1/1/1, fol. 84.

of bioprospecting or actual "hunting" for wild plants in China in the eighteenth and early nineteenth centuries. Rather, European horticulturalists depended on what the Chinese were willing to share with them. It was therefore cultivated plants, not wild ones, which made their way to Europe, introducing in a roundabout way the results of centuries-old Chinese traditions and practices of horticulture into European gardens. By way of these horticultural products, European gardeners thus became recipients of a rather one-sided cultural—and natural—transfer.[46] The European thirst for novelty could, however, only be quenched in this way for a limited amount of time. By the 1830s, the offer of the Fa-tee gardens was more or less exhausted, due to the limited amount of species cultivated within traditional Chinese horticulture, making a visit there a disappointment for novelty-hungry European travelers.[47] The British and other Europeans had to wait until China's defeat in the Opium War in 1842 before they finally gained access to the wild plants of the Chinese interior and could fully exploit the floral riches of China.[48] In the meantime, however, specialists like Rudolf Seidel in Dresden had already started to fill their greenhouses with Asian novelties of their own making. By developing a distinct product of global horticulture, namely an ever-expanding number of camellia cultivars, they tried to overcome not only European dependencies on Asia but also limits set by nature.

3 Dresden Camellias

As in Britain, horticulture was on the rise in nineteenth-century Germany. Exotic plants were no longer a prerogative of the titled and the wealthy but also found their way into the living rooms of the middle, and to some extent even onto the windowsills of the lower classes.[49] To fulfill the botanical desires of an increasingly urban population, a new type of business emerged, the so-called nurseries. They were often founded by gardeners who had worked or were working in aristocratic gardens, where they not only acquired expertise in handling rare

[46] This was, of course, characteristic of the European trade with China. From the wealth of literature see Jürgen Osterhammel, *Die Entzauberung Asiens: Europa und die asiatischen Reiche im 18. Jahrhundert* (München: Beck, 1998); Maxine Berg, Felicia Gottmann, Hanna Hodacs, and Chris Nierstrasz, ed. *Goods from the East, 1600–1800: Trading Eurasia* (Houndsmill: Palgrave Macmillan, 2015); Anne Gerritsen, *The City of Blue and White: Chinese Porcelain and the Early Modern World* (Cambridge: Cambridge University Press, 2020).
[47] Fan, *British Naturalists*: 30–31.
[48] Fa-ti Fan, "Victorian Naturalists in China: Science and Informal Empire," *BJHS* 26, no. 1 (2003): 1–26; Edwards, *Plant Hunter's Atlas*: 84–91, 100–6.
[49] Harald Bischoff, "Faktoren der Nachfrage nach Zierpflanzen," *Zeitschrift für Agrargeschichte und Agrarsoziologie* 57 (2009): 43–57; Christiane Holm, "Bürgerliche Wohnkultur im 19. Jahrhundert," in *Das Haus in der Geschichte Europas*, ed. Joachim Eibach and Inken Schmidt-Voges (Berlin: de Gruyter, 2015); Sophie Ruppel, *Botanophilie: Mensch und Pflanze in der aufklärerisch-bürgerlichen Gesellschaft um 1800* (Göttingen: Vandehoeck & Ruprecht, 2019).

plants, but often gained access to their trade goods in the first place. They found eager customers among the *gebildete Stände* (polite society) for whom the study and cultivation of plants had become an enlightened pastime.[50] While initially concentrating on their immediate surroundings, quite a few "botanophilists" were also eager to acquire hitherto unknown plants from far way, not so much to acquire status symbols but rather to satisfy their curiosity and to engage in religious and moral contemplation.[51] In any case, novelties were much sought after and it became part of the commercial nurseries' business strategy to constantly provide new plant species for the market—hence the desire for novelties from China. While many nurseries sought to provide the broadest possible range of species—the Erfurt nursery *Haage & Schmidt* was said to surpass most botanical gardens with its range—some sought their advantage in specialization. Among them was Jacob Friedrich Seidel, who turned Dresden into one of the foremost centers, if not *the* center, of camellia cultivation in the first half of the nineteenth century.

As we saw in the beginning, Seidel started cultivating camellias early on in his career as nurseryman. At that time, they could still be justifiably called "very rare plants," as he did in 1816 in an advertisement in the local paper, in which he offered thirteen different varieties of camellias for sale.[52] By 1824, Seidel could already offer nineteen varieties to his customers; by 1830, he boasted a selection of fifty. Camellias can differ in both their leaves and flowers. One variety, *Camellia japonica var. petalis plicatis*, was for example described as having "broadly lance-shaped leaves reflexed at the end, very shining and with blossoms red and brilliant" while another, *Camellia japonica var. flore pleno incarnato*, was characterized by "leaves strongly nerved, flowers with numerous petals and a pale flesh colour."[53] The rapid increase in varieties of *Camellia japonica* was due to a special property of the shrub—it forms spontaneous mutations, meaning that one branch of a flowering plant may suddenly change the color or shape of its flowers, or show varieties in its foliage. By making a cutting of this part of the plant, the new characteristics can be easily propagated and introduced as a new variety. This method precludes selective breeding, which was the method favored in British and Belgian nurseries. By crossing different varieties and rasising the hybrids from seed, they produced a very great number of cultivars. By 1836, Seidel claimed to have 308 varieties in cultivation, by the early 1860s this had risen to an astounding 1100—a multitude of camellia

[50] Reinhard Blänkner, "Die 'gebildeten Stände'. Neuständische Vergesellschaftungen um 1800," in *Bürgertum. Bilanzen, Perspektiven, Begriffe*, ed. Manfred Hettling and Richard Pohle (Göttingen: Vandenhoeck & Ruprecht, 2019): 107–135.
[51] Ruppel, *Botanophilie*: 454–64.
[52] Riedel, "200 Jahre Erwerbszierpflanzenbau": 22.
[53] *The Botanist's Repository, for new and rare plants* 10 (1811): Plate DCLX; Plate DCLXII.

varieties unheard of in its native lands.[54] To create new varieties, Seidel relied on his own growing stock but most likely also imported plants from England, which may in turn have come directly from China, or from the nurseryman Conrad Loddiges, who was also known for his good stock of camellias. Further varieties could be had from competitors in France and Belgium; the nurseries of Alexandre-Jacques Verschaffelt (founded 1824) and Louis van Houtte (founded 1839) in Ghent also specialized in camellias.[55]

What set Seidel apart was the fact that he went about the cultivation of camellias very systematically, planting his shrubs in long rows under glass so that he could control characteristics and preclude doubles. He also used his immense glasshouses to demonstrate the extent of his varieties to customers, and to prove that they were genuine. Indeed, a special feature of Seidel's nursery was a trellis made up of camellias which was, according to contemporaries, a sight worth seeing and a good reason to visit Dresden.[56] The trellis was "70 feet long and 8 feet high, consisting of 20 different varieties of camellias, each with hundreds or even thousands of flowers." Seidel claimed: "In Germany, on the whole continent, even in England, an equally beautiful trellis is not to be found." He also used it as a marketing tool, inviting "polite society" (*das gebildete Publikum*) to visit while the camellias were in bloom, being certain of the "loud admiration and applause of the numerous visitors as well as the most favorable verdict" that had already been expressed publicly several times.[57] Success certainly proved Seidel right, as can be seen from his ever-growing number of customers and his acceptance in horticultural circles.

At the humble beginning of his nursery, Seidel directed his offers at customers living in the vicinity of Dresden as well as walk-in custom, as is indicated by the placement of his 1816 advertisement in the local newspaper. But Dresden, a town of about 60,000 inhabitants at that time, was not a sufficient outlet for Seidel's growing business, which soon produced several

[54] T. J. Seidel (=Jacob Friedrich Seidel), *Anleitung zur Cultur und Vermehrung der Camellien* (Dresden, 1837): 16; Gerhard Schimmler, *Die Entwicklung der Kamellien-, Azaleen- und Erikenkulturen Deutschlands* (Würzburg-Aumühle: Konrad Triltsch, 1934): 100

[55] René De Herdt, Ronald Viane, Lucien Debersaques, *History in Flowers – Flowers in History: Gentse Floraliën 1808–2008* (Tielt: Lannoo, 2008): Chapters 6 and 7.

[56] *Blumen-Zeitung* 7 (1834): Column 134.

[57] "Auserordentlich [sic] ist in einem solchen Hause der Anblick eines in voller Blüthe stehenden Spaliers von Camellien, wozu sich diese Pflanzen besonders gut zu eignen scheint. Der Verfasser dieses besitzt ausser mehreren neuangelegten, ein ausgebildetes Spalier von 70 Fuss Länge und 8 Fuss Höhe in 20 Sorten Camellien bestehend, wovon jeder einzelne Stock mit einer Blumenzahl von mehreren Hundert, ja bis zu Tausend prangt. In Deutschland, auf dem ganzen Continent, ja selbst in England ist ein gleich schönes Spalier nicht zu sehen. Es erregt daher während der langen Dauer seinen Blüthenzeit fortwährend die laute Bewunderung und den Beifall der zahlreich Besuchenden und das günstigste Urtheil wurde mehrfach öffentlich darüber gestprochen. Die Ansicht dieses Spaliers, so wie der übrigen Häuser steht während der Blüthenzeit der Camellien dem gebildeten Publikum jederzeit offen." Seidel, *Anleitung zur Cultur und Vermehrung der Camellien*: 10.

thousand camellia cuttings annually, and even tens of thousands by the 1830s. By 1834, he was already sending his camellias not only to Madrid and Florence, but even as far afield as St. Petersburg and Moscow, where the Russian foreign minister, Karl Robert von Nesselrode (1780–1862), was one of his loyal customers.[58] The prices of Seidel's camellias ranged from the modest sum of 16 groschen for the *Camellia japonica var. alba plena*, which had been brought to Europe as early as 1792 and was thus one of the oldest cultivars among Seidels collection, to the important sum of 6 thalers for rarer and newer varieties such as *Camellia japonica var. marmorata* or *Camellia japonica var. venusta*.[59] The variety *elegans*, which had been created by the English breeder Alfred Chandler—and which is still being sold today—cost 2 thalers at Seidel's. He continued to expand his business during the following decades, so that by 1855 it generated "important sums of revenue," as a report in the local horticultural magazine stated. By that time, he had some competitors in Dresden; the combined volume of camellias they shipped out annually lay at about 100,000.[60] Even these numbers were dwarfed, however, by the Belgian camellia specialists who exported around two million plants each year, sending them to Germany, Italy, and the East and West Indies as well as Russia.[61] Seidel acknowledged the competitive pressure exerted by the Belgians but claimed that only their priciest cultivars equaled his own.[62] The many gold medals won by Seidel's camellias at various flower shows certainly supported his claim of excellence, as did his membership in learned societies. He was invited to join the Horticultural Society in London as a corresponding member, and elected as deputy director of the Flora Society, Dresden's local horticultural association, where Seidel mingled with eminent botanists such as Ludwig Reichenbach (1793–1879), director of Dresden's botanical garden and professor of botany.[63] While Seidel owed much of his success to his own diligence and talent, he certainly profited from the general interest in horticulture and botany, which led not least to the founding of the already mentioned Society for Botany and Horticulture, *Flora*, in Dresden in 1828. The Flora Society was dedicated to "promoting botany and culture" and was supported by a broad section of the educated middle class, as its members included botanists, pharmacists, teachers, commissioners, accountants, lawyers, and other plant lovers who were admitted by vote.

[58] Hans-Rudolf Schnieber, "*Die Entwicklung des Zierpflanzenbaus von 1800–1939 am Beispiel Dresden"* (PhD diss., Technische Hochschule Hannover, 1958): 45–46.
[59] A copy of Seidel's price list for 1835 can be found in *Blumen-Zeitung* 7 (1834): November (unpaginated).
[60] Schnieber, *Die Entwicklung des Zierpflanzenbaus*: 46.
[61] De Herdt et al., *History in Flowers*: 207.
[62] Jacob Traugott Seidel, "Ueber die Camellien-Cultur und deren Fortschritte in neuerer Zeit," *Mittheilungen über Flora, Gesellschaft für Botanik und Gartenbau zu Dresden* 1, no. 4 (1848): 92.
[63] Haikal, *Der Kamelienwald*: 77–81.

Professional gardeners and nurserymen like Jacob Seidel soon joined their ranks. Meetings were held once a month in the evening, first in the private home of one or other of its members, and later in a pavilion of the princely summer palace, after duke Friedrich August II had become the society's patron.[64] It is interesting to note that while the association's proclaimed mission was to further "national [i.e. Saxon] horticulture in all its branches," this did not exclude a keen interest in exotic plants —— on the contrary. From the outset, the annual flower shows organized by the association asked for contributions in such categories as "non-European flowers with beautiful blooms," "well-cultivated rare plants," "a group of camellias with twelve varieties," "decorative indoor plants" or "exotic plants grown from seed in Saxony."

In the beginning, only 400 plants were sent in—by 1839, this number had risen to 7,185, demonstrating not only a rise in membership and the general importance attached to the society's annual shows, but also to the breadth and range of public and private horticulture.[65] The explicit aim of these flower shows was to bring a broad range of plants to the public's notice and to engage the public with these plants, but also to demonstrate both on a national and international level the horticultural expertise of Dresden's gardening community.[66] Furthermore, the Flora Society was part of an international network which involved not only the exchange of both literature and reports between learned societies, but also the exchange of exotic seeds and plants. Seidel thus profited in his endeavors from a growing and supportive community.

As an expert in his own right, Jacob Seidel contributed by continuing to spread his knowledge of camellias. As he had already declared in his 1837 publication, he did not consider that keeping secrets was of any advantage: "It is my view of the matter, that it can only be desirable for me if all my business friends succeed in seeing their efforts and time crowned with the best results. This is the only way to maintain and increase interest in gardening, and the more enthusiasts there are, the better off the commercial gardeners will certainly be."[67]

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[64] Carl Traugott Schramm, "Bericht über das zwölfjährige Bestehen der Flora, Gesellschaft für Botanik und Gartenbau zu Dresden," *Mittheilungen über Flora, Gesellschaft für Botanik und Gartenbau zu Dresden* 1, no. 1 (1848): 7–58.

[65] Carl Traugott Schramm, "Ueber Pflanzen- und Fruchtausstellungen," *Mittheilungen über Flora, Gesellschaft für Botanik und Gartenbau zu Dresden* 1, no. 1 (1848): 74–76.

[66] Schramm, "Bericht über das zwölfjährige Bestehen": 40.

[67] "Ich habe nunmehr das Wesentliche über die Cultur und Vermehrung der Camellien mitgetheilt, ohne aus irgend einer Sache ein Geheimnis zu machen. Sollte mir jedoch der Einwand gemacht werden, als könnte ich meine Erfahrungen ohne meinen eigenen Nachtheil nicht veröffentlichen, so begegne ich diesem Vorurtheil durch meine Ansicht von der Sache, dass es mir nur wünschenwerth sein kann, wenn es allen meinen Geschäftsfreunden gelingt, ihre Mühe und Zeit mit dem besten Erfolg gekrönt zu sehen. Nur dadurch erhält

Accordingly, he reiterated his insights won over decades of cultivating camellias in a formal lecture he gave at one of the Flora Society's meetings, which was subsequently printed in the society's magazine.[68] In this lecture, Seidel demonstrated a keen awareness of the growing international literature on camellias, and used the opportunity to suggest that the Flora Society produce an illustrated publication. As Seidel stressed, Dresden could be considered a most suitable location for such an undertaking, as there existed not only important collections of camellias and a great store of local expertise, but the Dresden horticulturalists also cultivated sufficient numbers of all the many varieties to create true exemplars.[69]

Speaking on the propagation of camellias, Seidel presented to his fellow members his tried and tested methods, but also revealed some failed attempts of grafting. Nowhere in this lecture, nor in his previous publications, did Seidel make any reference to Chinese methods of cultivation. Indeed, although he very pointedly acknowledged that "as the camellia originates from Japan, it will never become a native of our parts and always require our care and attention," any advice on the plant's cultivation, Seidel claimed, came from his own practical and empirical knowledge.[70] Despite the British interest in Chinese horticultural techniques, no knowledge about them was ever transmitted along with the plants, making the camellia, despite its status of a cultivated species, yet another case of agnotology, a term coined by Londa Schiebinger and Robert Proctor to denote the production of ignorance, be it conscious or unconscious.[71] While the plants were treasured, the techniques and expertise developed in their native lands were deemed irrelevant to the kind of (horticultural) knowledge favoured by Europeans. With their ignorance regarding Asian horticultural traditions happily maintained, Europeans could continue to bask in a feeling of superiority when cultivating their non-native plants. The plants might have travelled and raised admiration, but their native context did not.

4 Conclusions

The nineteenth century was a period of plant fever in Europe: In ever increasing numbers, plants were sought, classified, and placed in scientific and private collections. This applied to both European and non-European plants. Botanists from Württemberg in south-western

sich und steigt die Lust an der Gärtnerei und jemehr es der Liebhaber giebt, je besser stehn sich gewiss die Handelsgärtner." Seidel, *Anleitung zur Cultur und Vermehrung der Camellien*: 14–15.

[68] Seidel, "Ueber die Camellien-Cultur".

[69] Seidel, "Ueber die Camellien-Cultur": 91.

[70] "Indem diese Pflanze, welche aus Japan stammt, in unserm Clima nie einheimisch werden und stets unserer Pflege bedürfen wird." Seidel, *Anleitung zur Cultur und Vermehrung der Camellien*: 5.

[71] Robert Proctor and Londa Schiebinger, ed., *Agnotology: The Making and Unmaking of Ignorance* (Stanford: Stanford University Press, 2008); Londa Schiebinger, *Plants and Empire*: 226–41.

Germany founded a joint-stock company to equip expeditions, the British middle classes were caught up the "fern craze," searching for new species all over the British Isles, and wealthy enthusiasts paid top prices for rare orchids. This wide-ranging interest also brought commercial suppliers to the scene. Commercial nurseries in Great Britain, Belgium, and France sent out plant hunters to procure new species in the remotest corners of the world, often exploiting the available resources without restraint. Global infrastructures, be they commercial as in the case of the British and other Europeans in China and Japan, or imperial and colonial as in India and the Caribbean, supported this endeavor and drew plant lovers' enthusiasm into a complex web of global connections and dependencies.

The German involvement in the botanical reordering of the world has so far been studied with respect to botanical excursions abroad and agricultural development in German colonies in the later nineteenth century. As this chapter has shown, these developments had an important prehistory, which is to be found in the realm of horticulture rather than economic botany. Even at the beginning of the nineteenth century, German nurseries benefited from structures built up by Europeans powers, if only at second hand. Dresden's development into a center of camellia cultivation, the increasing presence of exotic plants in local flower shows, and the gathering of botanical knowledge were undeniably part of a broader imperial and colonial project. They are part of the historical framework which allowed a town in Central Europe to develop into an internationally recognized hotspot for the breeding of a beautiful flowering shrub from East Asia. Until the mid-nineteenth century, European bioprospecting in China was restricted to cultivated plants that needed to be acquired as regular commercial goods. That the center of camellia cultivation shifted away from East Asia to Europe was due to the camellia's natural properties rather than exploitative practices. It was both the refining of Chinese cultivars in European nurseries and the many spontaneous mutations which made the plant so satisfactory with regard to the European desire for novelty—a desire which, incidentally, was not shared by Chinese horticulturalists.

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