# Imperial Botanical Network and the Formation of the Hong Kong Botanical Gardens

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#### Abstract

onspress This article presents an alternative perspective to the prevailing view that the Hong Kong Zoological and Botanical Gardens were established solely through negotiations between colonial authorities and the Hong Kong government. We argue that the role of the imperial botanical network should also be considered. The network facilitated the explorations, imaginations, and connections of botanists in Hong Kong from the British occupation to the establishment of the gardens, revealing their contribution to Hong Kong's significance in the field of imperial botany. Through exploring the people and events surrounding the gardens' establishment, the article offers a unique perspective on revealing Hong Kong's early colonial period.

# Introduction

Despite being the oldest public park in the city, the historical significance of the Hong Kong Zoological and Botanical Gardens (also named Hong Kong Botanical Gardens) has often been overlooked, which leads to a lack of in-depth knowledge about its development. As a result, many aspects of the gardens' past remain shrouded in mystery, including the motivations behind its creation. D. A. Griffiths and S.P. Lau's articles on the history of the botanical gardens in the nineteenth century remain the primary reference for researchers today (Griffiths; Griffiths and Lau). Their comprehensive research involved collecting a vast amount of data, including government documents, botanical gardens' reports, and local newspapers, all of which were used to provide a detailed account of the gardens' establishment and development. However, the broad range of

functions and activities within the botanical gardens meant that many people and events were involved, making it challenging for Griffiths and Lau to cover all aspects of the gardens' history within the limited space of their articles. Consequently, they could not provide an in-depth account of the garden's establishment process, an area that this article aims to supplement and expand upon.

Griffiths and Lau's research into the establishment of the botanical gardens shed light on the lengthy process between the initial proposal and its implementation. The authors discovered the Hong Kong colonial government faced challenges in securing funding for the project, as the British colonial office did not agree with the use of colonial funds for the construction costs until 1861. Their analysis focused on the correspondence between Hong Kong and Downing Street, as they believed the decisionmaking process primarily involved negotiations between the colonial office and the Hong Kong government. Their identified cause for the colonial office's altered perspective was twofold: Firstly, the colonial governor at the time, Hercules Robinson, transformed the botanical gardens into a leisure space. Secondly, the colony's financial situation experienced an upturn which also played a role. While these factors undoubtedly played a significant role in the decision-making process, this article argues that Griffiths and Lau's standpoint neglected the crucial role played by the imperial botanical network.

The imperial botanical network referred to in this article is a system of botanists and botanical gardens centered around Kew Gardens, which took shape in the latter half of the nineteeth century. Previous research has shown that under the leadership of William Hooker and his son Joseph Dalton Hooker, Kew Gardens maintained a world-wide relationship with the botanists and the British government, influencing attitudes towards botany in British colonies and the operation of colonial botanical gardens (e.g., Brockway; Desmond; Drayton; McCracken). Although this network did not have the power to dictate decisions made by the colonial office or the Hong Kong government, its influence was significant. Griffiths and Lau noted that the attitudes of the colonial office and the Hong Kong government towards botany and the establishment of botanical institutions in Hong Kong changed before 1861. As this article shows, this was due to the imperial botanical network's recognition of Hong Kong's ecological diversity and the importance of botany.

This article aims to demonstrate the crucial role played by the imperial botanical network in establishing the Hong Kong Botanical Gardens. It is divided into three parts to illustrate their contribution. By looking at the

writings and the observations of the botanists, the first part examines how Hong Kong became an essential destination for botanical exploration and discoveries. In the 1840s, three botanists discovered the remarkable diversity of plant species in Hong Kong, thus challenging the prevailing view that it was a "barren rock" devoid of plant life. Their work established Hong Kong's significance in modern botany and laid the foundation for the development of botanical gardens. The second section provides an overview of the construction of the botanical gardens in the 1850s. By analyzing the communication between the Hong Kong government, colonial officials, and Kew Gardens, this section seeks to supplement our understanding of the role of botanists in this process and how they positioned the colony within the imperial botanical network. The last section explores the intention of Kew and how it made use of Hong Kong in the 1860s to gain an understanding of Chinese botany. It also illustrates how the imperial botanical network provided legitimacy to the botanical gardens and how it became a scientific institution beneficial to the British Empire.

# Ι

The imperial botanical network came into effect in Hong Kong when botanists began to explore the natural ecology in the 1840s and discovered that this tiny island was home to many different plants. Their findings contrast our impression of early Hong Kong, which was often considered a "barren rock" before the British occupation. Although this stereotype has been challenged, with historians explaining how this terminology was being constructed to favor the political ruling of the British while communities and commercial activities were discovered on the island before 1841 (Carroll 9–10; Decaudin 68–70), few researchers have noted that when the notion of barren rock was being constructed in the 1840s, the botanists had already dispelled this misconception through their discoveries in Hong Kong.

Once Hong Kong was turned into a British colony, botanists became interested in this region. In 1843, at the general meeting of the Agri-Horticultural Society of Western India, the idea was proposed that if Hong Kong could establish a similar society "in communication with the Societies in India," it would benefit both countries by acquiring accurate information about the Chinese system of Agri-Horticulture (Agri-Horticultural Society of Western India 77). There is no evidence to indicate that this suggestion was put into action. Comparable organizations did not appear until the late nineteenth century, such as the Horticultural Exhibition Society in the 1870s and the Horticultural Society established in 1905. Nevertheless, the Royal Asiatic Society Hong Kong Branch, which was founded in 1847, had expressed its intention to establish a botanical garden. In his inaugural address as the president of the Society, Governor John Francis Davis proposed the establishment of a botanical garden under the supervision of the Society, with attention directed to "practical projects and to natural history, geology, and botany." Although his suggestion received much encouragement from politicians at home, he had to convince the colonial office to grant "a moderate piece of ground" for the garden (Royal Asiatic Society Hong Kong Branch 2; Royal Asiatic Society of Great Britain and Ireland 11).

As Griffiths and Lau suggest, the plan to build a botanical garden was put on hold due to financial constraints. After Davis left Hong Kong in 1848, the plan was continued by Charles Gützlaff, the Chinese Secretary of the government, and was approved at a meeting on July 4 of the same year. In order to address the funding issue, Gützlaff proposed the establishment of a garden committee, which would be responsible for "drafting a memorial to the colonial government and to the Royal Asiatic Society for assistance, either by funds or otherwise, towards establishing a botanical garden in Hong Kong" and seeking support from botanical or horticultural societies in England (Griffiths 189). Yet, the colonial government was reluctant to allocate funds to establish a botanical garden. Two years later, in 1850, Charles Joseph Braine, a member of the Society and a partner of Dent & Co., proposed that Green Bank, his residential area with a garden featuring diverse plant specimens and trees, should be purchased by the government and transformed into a botanical garden. However, the government rejected the proposal, citing the "financial resources of the colony, as well as the absence of any person to whom it would be possible to entrust the management of such an establishment" (Bonham 27–28).

In the 1840s, three botanists visited Hong Kong for short periods of time and conducted plant exploration and collection on the island for various reasons. These botanists included Richard Brinsley Hinds, who arrived in Hong Kong in 1841 on board Her Majesty's Ship (H. M. S.) Sulphur, John George Champion, who was stationed in Hong Kong with the military from 1847 to 1850, and Berthold Carl Seemann, who visited Hong Kong in 1850 on board H. M. S. Herald. The botanists recognized the ecological importance of Hong Kong, despite the challenges of the early colonial period with the difficulties in establishing botanical organizations and institutions. More importantly, they shared their plant collection and information gathered with the imperial botanical network, including publishing articles and sending specimens to Kew Gardens for preservation. In addition to the above process and their achievements, what is even more noteworthy is that they expressed surprise at the ecology of Hong Kong and believed that the impression of "barren rock" was incorrect.

Hinds was the first botanist to conduct botanical exploration in Hong Kong. As the naturalist on board H. M. S. Sulphur, he traveled around the world in 1835 to collect plants and made significant contributions in the Sandwich Islands and California (Mathias 410; Kay 102-34; Lightner 1). Although Hong Kong was not one of his intended destinations, he arrived on the island in January 1841, when Sulphur, led by Edward Belcher, was instructed to conduct the colony's first survey (Belcher 147-49). This survey produced the first scientific survey map of Hong Kong after the British took over (Dung 70–72). Despite arriving in the middle of winter and experiencing dry conditions, Hinds discovered almost 140 plant species during his stay (Bentham 8). After completing his journey, with the support of Kew Gardens, he obtained funding from the British government to publish his botany expedition (Hinds, "Richard Brinsley Hinds" 1840, 15 Feb. 1843). In gratitude for their assistance, Hinds gave Kew Gardens his plant collection in Hong Kong, including some hastily drawn sketches of plants, making it the first collection of Hong Kong displayed at this British botanical center (Hinds, "Richard Brinsley Hinds" 10 Feb. 1843).

In addition, Hinds published the first botanical article on Hong Kong's plants in *The London Journal of Botany*, edited by William Hooker, the Director of Kew Gardens, together with the identification and description of the famous British botanist George Bentham. In the article, Hinds recalled that Hong Kong was similar to other islands at the Pearl River's mouth, being "wild, dreary, bleak, and apparently extremely barren" and inhabited by "fishermen and pirates." Therefore, like many British, he foresaw that such "sameness and barrenness" could not "convey a very favorable impression of the variety and interest of the vegetation." However, after observing Hong Kong, he believed the impression "improved on a closer inspection." Especially in the valleys, he found "the greatest diversity." Although it was difficult to see plants on "the shoulders of the hills," and even "trees can scarcely be said to exist," he assured that this island had "a great variety of low pretty evergreen shrubs" (Hinds, "Remarks" 480–81).

Another botanist was Champion, a Lieutenant Colonel in the ninetyfifth regiment. As a military officer, he was stationed at various overseas locations with the army, which provided him with numerous opportunities to explore exotic plants (Troyer 125). He developed an interest in the study of botany during his service in Cephalonia, where he began exploring the natural history of the region and decided botany was one of "his favorite pursuits" (Champion 6). His interest in botany continued to grow, he even worked with George Gardener, the Superintendent of the Royal Botanic Gardens of Ceylon, on a botanical exploration in southern Ceylon. Motivated by his strong passion for botany, Champion investigated the flora of Hong Kong immediately after arriving with his regiment in 1847 and discovered almost 600 species of vascular plants and ferns. As there were no facilities, such as herbaria, in Hong Kong for Champion to refer to, he had to send the plants he collected in Hong Kong back to Ceylon to be identified by Gardener on his behalf. Additionally, Gardener also transferred the plants collected by Champion to his teacher Hooker, which meant that Kew Gardens, in addition to Hinds' collection, also consisted of Champion's collection (Gardener, "George Gardener"). After Gardener's death, Champion continued to send the plants he collected in Hong Kong to Kew Gardens (Champion, "John George Champion"). In 1851, he even gifted his entire collection of Hong Kong plants to George Bentham (Bentham 10)

Although Champion did not publish any articles on the plants of Hong Kong, Gardener integrated the plants and data received from Champion into a report, which Hooker then published. It was published in *Hooker's Journal of Botany and Kew Garden Miscellany* in 1849, despite the death of Gardener throughout the process. Apart from introducing and analyzing Champion's collection, Gardener also recorded Champion's description of Hong Kong. He described that the island, as unexpected, was "much richer in vegetation than had hitherto been generally supposed." Besides, there were several "wooded valleys and ravines" he had yet to explore, and if he could access these areas, it would bring many "interesting species" to his study and research (Gardener, "Descriptions" 240–46).

When Champion departed from Hong Kong in 1850, Berthold Carl Seemann, a German botanist who had received training at Kew Gardens (Trimen 1), embarked on an epic voyage aboard the survey ship H. M. S. Herald. Seemann served as the naturalist on this scientific expedition, which took him to remote locations in the Americas, including Falkland Island, South America, and North America (Samson 287–93). During the return journey, the ship stopped in Hong Kong, offering Seemann an opportunity to explore the local botany (Seemann, *The Botany 351*). With extensive knowledge and experience, he collected a remarkable array of plants and ferns, adding valuable specimens to the growing collection of

botanical specimens from Hong Kong. At the same time, Seemann received support from two amateur botanists living in Hong Kong, Henry Fletcher Hance and John Eyre, who sent him the plants they collected in Hong Kong. According to Seemann's report, along with his own collection and the others received from Hance and Eyre, he discovered a total of 773 plant species. Based on Seemann's correspondence with Hooker, it appears that Kew Gardens might have sponsored Seemann's expenses in Hong Kong. As a result, he sent some of the Orchideae and seeds he collected in Hong Kong to Kew and arranged for Mr. Dustan in Hong Kong to receive and pay for the salaries of a Chinese man in Guangzhou who was willing to look for the rice paper plant (Seemann, "Berthold Seemann"). After returning to England, Seemann left all his collection of Hong Kong plants at Kew Gardens and allowed George Bentham to access them "for the purpose of identification and comparison" (Bentham 10).

In Seeman's report, there was an article titled "Flora of the Island of Hongkong," which introduced his discoveries and impressions of Hong Kong. Similar to the two botanists mentioned earlier, his experience in Hong Kong changed his assumption of this colony. For instance, he noted that "to a stranger landing" or looking from the sea, the mountains were covered with coarse grass, and there were many "bare, blackened rocks," while the island had only "a few bushes, or a solitary tree." Therefore, his first impression of Hong Kong was "very unpromising" and even offered him "the idea of almost absolute sterility." However, upon closer inspection, he believed botanists would be delighted to find that "their first impression is very deceptive." He further pointed out that in terms of the number and novelty of plant species found on the island, Hong Kong ranked very high in size and geographical location (Seemann, *The Botany* 355).

Despite the fact that Hong Kong was not the intended destination for these botanists, their unexpected stay led to a surprise as they discovered the island was home to a much more diverse range of plant species than they had initially anticipated. While it appeared to be a barren island at first glance, they quickly realized Hong Kong was not as desolate as it seemed in terms of botany and was full of value. Through donations and publications, the botanical importance of Hong Kong was notified throughout the imperial botanical network, attracting more botanists to research the island. This, in turn, contributed to the growing importance of botany. However, the botanists soon realized there was a need for a botanical garden in Hong Kong to facilitate further research and the cultivation of various plant species. Thus, the proposal for constructing a botanical garden emerged once again. In the 1850s, a significant increase in botanical exploration and collection in Hong Kong was fueled by a combination of factors. Apart from being inspired by discoveries made in the 1840s, there were many active amateur botanists among the European residents of Hong Kong who used their leisure time to collect plants on the island and in the surrounding areas, discovering many species unfamiliar with modern botany. At the same time, professional plant collectors were also sent to Hong Kong, gathering a large number of local plants. While previous accounts of the history of botanical exploration in Hong Kong have focused on the discoveries made by these professional and amateur botanists, little research has examined them from the perspective of the imperial botanical network (Yip et al. xvi-xxi). Meanwhile, proposals for the construction of a botanical garden were once again raised. Griffiths and Lau noted the proposal was mainly put forward and completed during the tenure of two colonial governors in the 1850s, John Bowring and Hercules Robinson. Therefore, their attention was placed on how these governors lobbied the colonial authorities for the garden, overlooking their relationship with Kew Gardens (Griffiths and Lau 55-77).

Like the botanists mentioned in the previous section, two plant collectors from the United Kingdom and the United States passed through Hong Kong during their overseas plant-collecting expeditions in the 1850s and collected a significant number of plant species on the island. The first collector was Charles Wright from the United States, who made two stops in Hong Kong between 1854 and 1855 while participating in the North Pacific Exploring and Surveying Expedition as a naturalist from 1853 to 1856. During his stay in Hong Kong, he collected plants on the island, as did his assistant James Small. Although their collections were brought back to the United States, when the renowned American botanist Dr. Asa Grav realized George Bentham intended to publish a book on Hong Kong plants, he sent a duplicate set of Wright's collections to Kew Gardens, which consisted of 500 species (Bentham 11). Another collector was Charles Wilford from Kew Gardens. In 1857, when the British government decided to present H. M. S. Emperor as a gift to the Japanese government, Wilford was assigned by Kew to participate in the ship's voyage to Japan with the duty of plant collecting (Bentham 11; Rowley). At the same time, Wilford was instructed to collect plants in Hong Kong as the ship was required to anchor in the colony while waiting for the Japanese government's approval (Seymour). Within a year, Wilford accumulated

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400 species for Kew Gardens and left Hong Kong in 1858 (Bentham 11). The collections of both Wright and Wilford added significantly to the growing body of botanical knowledge about Hong Kong.

Besides, a small group of amateur botanists emerged in Hong Kong, particularly among the civil and military services. Two individuals stood out and had close connections with Kew Gardens: William Aurelius Harland and John Eyre Harland, who served as the government surgeon at Victoria Seamen's Hospital in Hong Kong from 1847 to 1857, habitually collected plants on the island. After returning to London in 1857, he brought back "a very valuable set of Hong Kong plants" (Bentham 10-11). Harland presented some of his collection to Kew Gardens through John Bowring, as he believed that his collection included some Hong Kong ferns that Champion had yet to mention (Seemann 351; Bentham 10–11; Harland "William Aurelius Harland" 20 Jul. 1857, 10 Aug. 1857). As for Evre, he was an officer in the British Royal Artillery. During his residence in Hong Kong from 1849 to 1851, he conducted several botanical explorations on the island, where he met and collected alongside Champion, Seemann, and Hance (Natural History Museum). In December 1851, he sent a box of seeds he collected in the autumn to Kew, which contained a new genus of Myrtaceae that Dr. Hance had classified as Eyrea pulchella (Eyre, "John Eyre to William Jackson Hooker" 30 Dec. 1850). The following year, he began to send his drawings of Hong Kong plants to Kew apart from seed and specimens' collections, especially when he was aware that Champion was preparing to publish a flora of Hong Kong (Eyre, "John Eyre to the Royal Botanic Gardens, Kew" 10 Aug. 1851). He wished Hooker could transfer his drawings and specimens to Champion. As a result, some of Eyre's collections were combined with Champion's herbarium. After Eyre's death, his son, Edward John Murray, approached Hooker in 1899 to "dispose" Eyre's belongings, including "a most valuable collection of (nearly 200) paintings of the wildflowers" from the vicinity of Hong Kong and two books of the Flora of Hong Kong (Murray).

Owing to the botanists' efforts, Hong Kong's plant ecology was acknowledged by the botanical network. Yet, the absence of botanical gardens or other botanical research institutions in Hong Kong restricted this colony's accomplishments and put pressure on the government of the time. In 1855, Governor John Bowring approached the colonial office, expressing the urgency for a botanist to support the Hong Kong government in answering numerous inquiries related to industries such as "dyes, oleaginous matters, fillies for textile purpose, materials for paper-making and other topics." Besides, he hoped the Kew Gardens could nominate a suitable candidate while the colonial office would permit the use of colonial funds to establish a botanical garden. Bowring highlighted the benefits and value of a botanical garden to the empire by convincing the colonial office. He argued Hong Kong was an essential gateway for the understanding of Chinese botany since the garden could "render valuable services, not to science alone, but to commercial interests as associated with science." He also emphasized that the prospective garden could be useful in "sending useful plants and fruits to the mother country and the Colonies" (Bowring, "John Bowring to Lord John Russell"). Therefore, Bowring suggested Hooker could offer a botanist to manage the garden, further demonstrating his perception of Hong Kong as one of Kew Gardens' outposts in East Asia.

Bowring's awareness of Hong Kong's possibilities in the imperial botanical network was due to his interest in botany, as he was an avid amateur botanist and had been in contact with Kew Gardens (Bowring, *Free Trade's First Mission* 173). While he was in Bangkok, despite being busy, he collected a set of Siamese plants for Hooker (Bowring, "John Bowring to Sir William Hooker" 21 May 1853). Through his correspondence with Hooker, it is clear that Bowring was actively searching for plants with commercial value for the empire in China and Southeast Asia. He believed his efforts could help China quickly provide plants for European gardens, as he expressed in 1855 (Bowring, "John Bowring to Sir William Hooker" 28 May 1855). However, Bowring soon realized he was too busy to achieve this ideal independently and required assistance from Hooker, further with the formation of a botanical garden.

Although Griffiths and Lau noted that Bowring had proposed the plan to establish a botanical garden to the colonial office, and it was approved in 1856, they did not discuss why Bowring shared such an idea and overlooked Bowring's seeking support from Kew either. In fact, Bowring was placing his bets on the colonial office and the Kew Gardens. He was writing a letter to Hooker introducing his plan on the same day that he sent the letter to the colonial office to convince the latter to support for his ambitious goal. In his conversation with Hooker, he indicated that if Hooker could offer a botanist to Hong Kong, he could not only manage the future botanical gardens by supporting Kew's botanical network but also develop his own intelligence network to fulfill the personal needs of Hooker. Besides, Bowring indicated he had sent a "student interpreter" to be stationed in Siam, who was allowed to enter the king's garden at the time. He planned to dispatch more interpreters to China and even Korea in the future. Hence, he begged Hooker to affirm Kew Gardens would send a botanist to Hong Kong with the approval of the colonial office (Bowring, "John Bowring to Sir William Hooker" 14 Aug. 1855). Even though there is no clear evidence that Hooker was in contact with the colonial office regarding this matter, Bowring continuously advocated for the feasibility of his plan to Hooker before getting approval from the colonial government. In December 1855, he explicitly mentioned that botanical gardens would be a useful institution in China for the collection and dispersion of fruits and flowers, as well as introducing new, beneficial vegetable products to China. He gave examples such as Shantung Cabbage, which was a variety not yet known in Britain at the time, as well as asparagus and sea kale, which were not found in China (Bowring, "John Bowring to Sir William Hooker" 1 Dec. 1855).

Even though the plan was eventually approved in 1856, Bowring faced numerous challenges in its implementation and failed to witness the completion of the garden within his term. He complained to Hooker about the slow progress of the construction, citing the need for land allocation as a major obstacle. Bowring's frustration was compounded by the fact that he had developed a large network of collectors in East Asia, and the delay in the garden's construction hindered his efforts to expand this network (Bowring, "John Bowring to Sir William Hooker" 11 Nov. 1856). Furthermore, the approval of the plan came with the condition that the colonial funds must cover other necessary expenses of the colony before the garden's construction could proceed. This meant that Bowring had to accomplish the basic needs of the colony before handling issues related to the gardens. Bowring remained committed to the project until his departure from Hong Kong in 1859. The project was passed to his successor, Hercules Robinson, for the continuation of the development of the botanical gardens.

In fact, Robinson was enthusiastic about taking over Bowring's plan and recognized the importance of the botanical gardens. As an amateur botanist, he also maintained a good relationship with Hooker before his appointment as governor of Hong Kong. In 1859, when he realized he would oversee Hong Kong, he asked Hooker for guidance on how he could serve Kew Gardens in China. In his correspondence with Hooker, Robinson even reported he had a "long chat" with Bowring before his departure from England (Robinson, "Hercules George Robert Robinson" 7 Jul. 1859). Although the specifics of their conversation were unknown, it is likely that they discussed the progress of the botanical gardens. Despite it being unclear whether the continuation of the project was due to Bowring's or Kew's instructions, Robinson was committed to moving forward with the plan. He sought advice from British horticulturist and traveler John Gould Veitch on establishing the gardens, and Veitch reported the details to Hooker (Robinson, "Hercules George Robert Robinson" 13 Apr. 1861). Additionally, when Robinson began the preparatory work for the gardens, he consulted Ferdinand von Mueller, director of the Royal Botanic Gardens in Melbourne, in searching for a suitable candidate for taking up the role of superintendent for the gardens. He established the Garden Committee to oversee its establishment in the colony, with Charles St. George Cleverley, the Surveyor General, J.J. Mackenzie, and William Walkinshaw as members. Once the project was sanctioned on November 30, 1861, with an allocation of £269 for the formation of the botanical gardens, Thomas Donaldson was appointed as the superintendent of the Government Gardens due to the recommendation of Mueller (Robinson, "Hercules G. R. Robinson").

Since the amount sanctioned by the Secretary of State for the colonies failed to cover the construction cost of the gardens, Robinson approved an extra  $\pounds_{4371}$  for the formation of the gardens. In order to justify this expenditure, he indicated the gardens could "contribute to the embellishment of the City of Victoria and the health and enjoyment of its inhabitants." Besides, he explained that the high cost was due to the difficult topography of the chosen site. But as the government's financial situation was in good shape, it could not be "better expended than in carrying out this [establishment of botanical gardens] undertaking" (Robinson, "Hercules G. R. Robinson" 12 Apr. 1862). Still, an addition of £3,259 was required in 1864 for the final stage completion of the gardens. The extra fee came from "changes in the plans" due to the rugged nature of the site and the "necessity of much blasting to remove large boulders." Other than that, various shrub trees, grass, and flowers were planted in the gardens, it was believed that the gardens would become "not alone an ornament but of much advantage to the residents of the city" (Robinson, "Hercules G. R. Robinson" 25 Apr. 1864). Even though part of the gardens was still under construction, it was opened to the public in August 1864 and "ha[d] been much used and appear[ed] to be much appreciated by the Public." It was treated as a public attraction, with a band show occurring in the evening. The final stage was opened to the public in 1871 and was renamed the Botanical Gardens.

Since the 1840s, the proposal for the establishment of botanical gardens had been put on hold due to a lack of budgetary funding. Yet, through the efforts of the imperial botanical network, not only was the ecological environment of Hong Kong valued, but the colonial office and colonial government were also convinced and hence sanctioned the colonial funds for the construction of the botanical gardens. Although there is no direct evidence that Hooker made recommendations to the colonial office or applied pressure on behalf of Hong Kong, the efforts of Bowring and Robinson in persuading Hooker as if suggesting Kew was influential in affecting the colonial office's policy regarding botanical issues. Therefore, the important question would be Kew's role and perception towards Hong Kong's botanical position and the establishment of the gardens.

#### III

In the 1860s, Kew Gardens began to express its concern for the botanical ecology of Hong Kong and the role of its botanical gardens in the imperial botanical network. Over the past two decades, many professional and amateur botanists had continuously supplied plant specimens and information collected in Hong Kong to Kew Gardens. This had not only resulted in the accumulation of a significant collection of Hong Kong plant specimens at Kew but had also changed Kew's perception of Hong Kong's botanical position. Griffiths and Lau's article mainly focused on the interaction between the Hong Kong government and the colonial office in determining the formation of the botanical gardens and omitted Kew's expectations and supportive measures for the implementation of the gardens. The two of them emphasized the communication between the Hong Kong government and the colonial office between 1856 and 1861 and occasionally touched on issues related to Hong Kong flora, mainly explained that Kew Gardens had published the first book introducing Hong Kong flora to the botanical world. Yet, Hong Kong flora was crucial in the sense that it secured the project of the formation of the botanical gardens in Hong Kong. Therefore, it is necessary to revise how Kew Gardens positioned Hong Kong in the imperial botanical network to fully realize the ongoing process of the development of the gardens.

In the mid-1850s, Kew Gardens began to persuade the British government to sponsor the publication of a series of books on the flora of the British colonies, which also involved conducting surveys of plants in territories under British rule. In 1859, Hooker stated this project would have "immense benefit to the Colonies and the Mother Country" (Drayton 201–06). With the support of the colonial office and various colonial governments, Kew Gardens subsequently published a series of books on the flora of West India, Hong Kong, British India, the Cape, West and

South Africa, New Zealand, Ceylon, Mauritius, British Guiana, Honduras, and Australia (Drayton 201–06). The Hong Kong edition, titled *Flora Hongkongensis: A Description of the Flowering Plants and Ferns of the Island of Hong Kong*, was officially published in 1861. It was compiled by George Bentham from the Hong Kong plant specimens preserved at Kew's herbarium and described a total of 1,056 species. The book had two significant implications: on the one hand, it was the first record of Hong Kong Island's flora and had profound scientific value; on the other hand, not every colony entitled to the publication of books on their local flora, so the publication reflected the level of emphasis of Kew upon the botanical position of Hong Kong.

In addition to recording information about Hong Kong plants, Bentham expressed his surprise at the small island's botanical diversity. Having never been to Hong Kong, his impression of the territory was mainly based on descriptions by navigators who thought Hong Kong was "so bleak and bare." However, Bentham was astonished that the plant specimens held at Kew Gardens and collected during the book's writing were discovered on the "diminutive island." Notably, he believed that Kew's collection of Hong Kong plants needed to be completed, and many places on the island were still waiting to be explored. Therefore, he urged botanical explorers to assist in "procur[ing] materials for the further illustration of the Hongkong Flora." In addition to acknowledging Hong Kong's botanical ecology, Bentham emphasized the territory's importance in the imperial botanical network. He believed Hong Kong not only supplemented and enriched both the Kew Gardens' and botanical world's understanding of East and Southeast Asian plants but also supported the imperial botanical network in understanding the economic crops of southern China (Bentham 14-15). This suggested that Hong Kong had economic benefits beyond its botanical value.

Kew Gardens' recognition of Hong Kong's botanical diversity and importance continued at least until the second half of the nineteenth century. Kew Gardens had high hopes for the Hong Kong Botanical Gardens, even before its opening. However, just before the final stage of the gardens were due to open, the supervisor of the construction project, Donaldson passed away, which left a vacancy of the post. So, Kew Garden was requested by the Hong Kong government to recommend a botanical expert to succeed Donaldson. Joseph Hooker, who was then the director of Kew and the son of his predecessor, recommended Charles Ford for the occupation. Once Ford was assigned, Hooker immediately instructed that the Hong Kong Botanical Gardens should become the headquarters for researching Chinese plants (Hooker, "Report" 7). Ford responded to this directive in his first report in 1872 and continued to work towards achieving Hooker's vision during his tenure (Ford 34). Besides, Hooker even instructed the colonial office that the objective of the Hong Kong Botanical Gardens should be placed under Kew's blueprint (Hooker, "Memorandum" 232). Kew's dominance and influences in the British Empire forced Ford to fulfill Hooker's mission despite facing opposition from local officials at times, even though he was dedicated to doing so. In the end, Ford's efforts helped to enhance the botanical gardens as an important center for botanical research and education, both in Hong Kong and in the wider imperial botanical network, despite facing all these uneasy situations.

### Conclusion

The role of the imperial botanical network in Hong Kong should not be ignored, even though there is no clear evidence suggesting the Kew Gardens played a crucial role in convincing the colonial office to approve the decision to use colonial funds for the formation of the Hong Kong Botanical Gardens. In the 1840s and 1850s, botanists who had explored Hong Kong offered a great variety of plant specimens they discovered in the colony to the Kew Gardens, which demonstrated the potential and possibilities of Hong Kong in the imperial botanical network and in the wider scientific community. At the same time, their discoveries were utilized by the colonial officials and became an argument for demonstrating the necessity of the botanical gardens in Hong Kong by discussing the plan with Kew Gardens as advice and a viewpoint to transform the project into an implementable plan. In 1861, when Kew published a comprehensive collection of Hong Kong flora that had been gathered over the past two decades, highlighting the territory's special role in the imperial botanical network and providing a new understanding of Hong Kong's ecology, it helped to re-shape the colonial office's attitude towards the construction of the Botanical Gardens, which had been under discussion for over 20 years. Ultimately, it played a significant role in the approval and construction of the gardens.

Since its inception, the botanical gardens have been viewed as a public recreational space. However, as this article demonstrated, the botanists involved in the planning of the establishment of the botanic gardens never viewed it as a park. To them, Hong Kong was not only entitled to a diverse botanical ecology but also the closest place for the imperial botanical network to establish a foothold near China. Once the botanical gardens were established, Kew anticipated that Hong Kong would become the headquarters for researching Chinese plants and bring useful value to the empire. As a result, as Fa-ti Fan's research shows, the gardens faced controversy between scientific research and entertainment services in its early days (66–68). This controversy was believed to be faded out in the early twentieth century when Kew Gardens' importance in the empire began to decline, leading to the botanical gardens being perceived as a park as we know it today.

Robert Peckham has reminded us that, in addition to urban development, we need to understand the history of green spaces and the natural environment in Hong Kong (Peckham 1178–82). However, not much attention was given to this aspect, particularly the development of Hong Kong botany. Although we were aware that the barren rock perception was a discourse formulated to glorify the ruling of the British Empire, it was challenged by the botanists as soon as they discovered the diversity of plant specimens in this colony as shown in this article. Thus, the botanical gardens, which we currently perceive merely as a recreational space, was once part of the massive plan of the imperial botanical network. Even though the contribution of the botany may not be vital to Hong Kong's political or economic development, it sheds light on a new and challenging perspective on Hong Kong's past, allowing us to see the history of this place in a more diverse way.

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