

The Calcutta Botanic Garden, nineteenth century

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ABSTRACT

The Calcutta Botanic Garden, which was created in the late eighteenth century, was the largest colonial garden of European empires. During the nineteenth century it became a center for the acclimatization and classification of plant species, with its botanists circulating living plants and dried specimens on various scales. The garden contributed both materially and symbolically to the functioning of the British Empire that financed it, and represented a microcosm in which three important topics from imperial history can be explored up close: the relation between science and specific locations, the circulation of natural objects, and the problem of human resources.



Employees of the herbarium from the Calcutta Botanic Garden, c. 1900. Central National Herbarium, Calcutta.

Empire, science, and location

Beginning with the creation of the Calcutta Botanic Garden in 1786, the British botanists who directed it tried to secure a monopoly over what they called botanical science. The numerous local practices relating to plants—whether culinary, religious, or medical—were observed and described by the colonial administration, but botanical science, according to its practitioners, should not be a local matter. The notion of “local” was, for that matter, used pejoratively in numerous colonial sources. As an institution, the botanic garden was one element

within an imperial system that ascribed great importance to the notion of globality.

For example, in voluntary contrast to so-called vernacular uses, the Calcutta Botanic Garden was conceived and described by its directors as a space whose local rootedness was less important than its participation in global networks. The very space of the botanic garden reflected this desire to create a site that was qualitatively separated from its immediate environment. According to a guide for the garden published in 1895, which underscored the need for a change of scenery, the purpose of growing numerous and diverse species on the garden's land was to create a voluntary contrast with the supposed monotony of Bengal plains.

Numerous works by historians on colonial botanic gardens have emphasized their global dimension, a perspective justified by the important economic role that they played in developing imperial economies. Close examination of the Calcutta garden archives nevertheless shows that tension between local realities and global aspirations was pervasive. This tension can especially be explored by focusing on the objects produced and circulated by those in charge of botanic gardens.

Circulating plants and objects

In the nineteenth century, colonial botanic gardens circulated seeds, living plants, dried specimens, letters, and books on various scales. The logistical questions connected to preparing and sending objects made up a large part of the Calcutta Botanic Garden's daily activities. Figures regarding the exchange of plants and seeds were carefully kept, and botanists mentioned them in the annual reports intended to justify how the funds allocated to the garden were used.

Examination of this data shows that rather than exclusively involving large-scale exchanges, the botanic garden's activities often involved local transactions. The vast majority of the living plants sent by the garden went to Calcutta and Bengal. Young trees and bushes were sent to regional administrators to be planted alongside roads, as well as in prisons, hospitals, and in the official residences of men of power. The garden thus served as a local nursery, a role that is confirmed by complaints from Bengal's private nurseries in the late nineteenth century accusing the botanic garden of practicing unfair competition.

The botanic garden did not just produce living plants, but also mass-produced documentary objects. Chief among these were plant specimens, which were gathered during botanical expeditions and then dried, identified, and carefully "poisoned" (the term used by botanists), which is to say daubed with toxic products such as arsenic, naphthalene, mercury chloride, and lead chromate with a view to their conservation. These specimens formed the basis for the scientific discourse developed by botanists, which culminated in botanical works (monographs in particular) garnering scientific recognition for their authors in the metropole. The conservation of specimens—like that of archives and books—did not simply have an instrumental value. For the administration of the British Empire, especially when it reached its peak in the late nineteenth century, managing and conserving mediums of information was a highly important activity that mobilized considerable labor.

Human resources

In all colonial botanic gardens, the share of the budget devoted to labor costs was quite substantial, representing at least half of all expenses. The Calcutta Botanic Garden devoted approximately two-thirds of its annual budget to it. The leadership team, which was made up of 4-7 people, consisted exclusively of British men in the nineteenth century, led by Scottish officers from the Indian Medical Service. The rest of the staff, approximately 150-200 people, was made up of local workers. The botanic garden's accounts reveal the monetary value of their respective positions: the small number of administrative positions cost more than all of the local labor, both skilled and unskilled.

Studying the hierarchical structures in the Calcutta Botanic Garden helps envision the nature of workplace social relations within a colonial setting. In all aspects of their botanical work, colonials relied on the physical strength, memory, and practical knowledge of locals. Administrators often lauded the sharp memory or manual skills of their employees, all while refusing to recognize their capacity for scientific reasoning. The garden employed, among others, numerous coolies tasked with construction work, collectors who were sent on expedition, office workers, and guards to ensure discipline among visitors. The example of these guards is especially interesting, for being local workers they were often from the lower end of the social scale, and their authority was little recognized by visitors. Prerogatives normally reserved for police officers had to be granted to them in the late nineteenth century in order to ensure their authority was obeyed to a greater degree.

The garden's administrative employees, who enjoyed substantial financial privileges compared to their local employees, were often struck by recurring physical and mental illnesses. While the botanic garden was supposed to promote the health of visitors, this was not the effect it had on members of its administration. The high mortality rate among European colonial administrators in tropical environments has been amply documented, as has "death by migration." Letters and files from the archives provide information regarding the daily life of expatriates in the Calcutta garden, which was characterized by strong and exclusive homosocial relations. These documents reveal the prevalence of alcoholism and various mental illnesses among these young men, who had been given hopes of social promotion upon their departure from the metropole. The case of these young expatriate gardeners shines a light on the British Empire's dysfunction in matters of human resources.

BIBLIOGRAPHY

AXELBY, Richard, "Calcutta Botanic Garden and the Colonial Re-ordering of the Indian Environment," *Archives of Natural History* 35, no. 1 (2008): 150-163.

BELLGO, Marine, *Enraciner l'empire : une autre histoire du jardin botanique de Calcutta, c. 1860-c. 1910* (Paris: Muséum national d'histoire naturelle, 2021).

CURTIN, Philip D., *Death by Migration: Europe's Encounter with the Tropical World in the 19th Century* (Cambridge: Cambridge University Press, 1989).

HARRISON, Mark, "The Calcutta Botanic Garden and the Wider World, 1817-1846," in Uma Dasgupta, ed., *Science and Modern India: an Institutional History, c. 1784-1947* (Delhi: Pearson Education India, 2011), 235-253.

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