Collecting, Classifying and Designing: What three Gisborne gardens tell us about Distance

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Abstract

In 1769 HMS Endeavour voyaged through the South Pacific, an envoy of Europe. The year 2019 marks 250 years since that voyage – the distance of time, set against the distance of geography. This paper focuses on a critical aspect of Endeavour's voyage: the collecting of plants.

With their first landfall, in Gisborne / Tairāwhiti, botanists Banks and Solander set about collecting and classifying specimens. This took place amidst the chaos of first encounters, and the death of a number of local Maori. In the small window of time before the Endeavour quickly departed, 40 plants were gathered.

This moment in time offers critical reflections on distance. First, scientific taxonomy imposes the distance of classification into a European system. Second, the collecting and classification of the 40 plants distances them from the numerous remaining flora in the area. And third, an apparent distance between 'native' and 'exotic' begins to open up.

These three distances are explored through three recent gardens developed in Gisborne. While each garden in some way references the arrival of the Endeavour and the collecting of plants, they develop different framings and narratives. The first garden developed was the Banks Garden, created by the Department of Conservation at the Cook Landing site. Supported by interpretation panels, this garden exhibits plants gathered and classified from the area. Second was the Endeavour Garden, a private garden owned by an American couple, and not accessible to the public, but with a clear narrative based on the plant list. Finally, the 1769 Garden is being developed at the property of Dame Anne and Jeremy Salmond, and includes not only those plants on the list, but also others that would have made up the 'impression' that the native flora would have made on Banks and Solander.

Keywords

Endeavour, Banks, Solander, Garden Design, Natives, Exotics

Introduction

Two hundred and fifty years ago, on 8th October 1769, HMS Endeavour made landfall in Poverty Bay/Tūranganui-a-Kiwa, on the East Coast of Aotearoa New Zealand's North Island. This envoy of Europe was a vector for commerce, culture, and science. While much has been written about the 'discovery' of New Zealand, the narratives of encounter, and the cultural impacts,[1] this paper focuses on how the collection and classification of plants using the language of science continues to resonate within the landscape today, through the language of design.

Under Captain James Cook, HMS Endeavour left Plymouth and travelled to South America, across the Pacific to Tahiti to observe the transit of Venus, and eventually to Aotearoa New Zealand and

Australia. Abel Tasman's 1642 voyage had reached New Zealand, but had plotted it as part of a Great Southern Continent. Cook's thorough survey charted nearly 4000 km of New Zealand's coastline, revealing its form, and ultimately its distance from any other land mass (Fig. 1).

Figure 1. Chart of New Zealand "Charts, Plans, Views and Drawings taken on board the Endeavour during Captain Cook's First Voyage, 1768-1771" The location of Gisborne is indicated with a red circle added by the authors. Reference no: Add.Ms.7085 f.17 Record no.: nhil 021 0000756 [permission to be sought from the British Library]

On board the Endeavour were the botanists Joseph Banks and Daniel Solander. Banks was the primary sponsor for the 1768 – 1771 HMS Endeavour voyage, and at 25 years old was already a

fellow of the Royal Society and an avid botanist. His sponsorship ensured the voyage included skilled collectors and illustrators, in particular the Swedish botanist, Daniel Solander who had learned the Linnaean system of taxonomy directly from Carl von Linné (Linnaeus). He worked alongside Linnaeus in field studies throughout Sweden, classifying over 7500 plants by the time he left there in 1760.[2] Solander was sent to England as a Linnaean 'apostle,' where he joined the Royal Society and eventually met Joseph Banks, who invited him on the Endeavour voyage.

Banks and Solander's plant collecting and classification translated the New Zealand flora into the Linnaean system, and classifications continue to be tweaked and tuned today.[3] They made lists of plants, prepared herbarium specimens, and gathered seed – for example of *Sophora microphylla* (Kowhai).[4] The inclusion of certain plants on the list has become a significant historical legacy and a mechanism of distancing in numerous ways. The lists endure as artefacts of that time, simultaneously inscribing some plants into history, and erasing others from the narrative.

As soon as the Endeavour made its first landfall in New Zealand, Banks and Solander set about collecting specimens, amidst the chaos of first encounters, and the death of a number of local Māori. Banks described the disastrous first encounters with Māori as "the most disagreable day My life has yet seen."[5] He later reports, "This morn We took our leave of Poverty bay with not above 40 species of Plants in our boxes, which is not to be wonderd at as we were so little ashore and always upon the same spot."[6]

This moment in time offers critical reflections on distance. First, there is the distance of science, and how the visitors' botanising imposed a foreign language on the plants. Second, the collecting and classification of the 40 plants distances them from the numerous remaining flora in the Gisborne area. Third, there is a narrative of 'native' and 'exotic' that traces the fluid nature of classification, and the symbolic power of these categories.

A critique of how these types of distance find form in the contemporary landscape centres on three Gisborne gardens. All of the gardens are based on Endeavour's plant collecting, or more broadly on the first encounter. The discussion first turns to these three gardens to place them in context, and subsequently focuses on the themes of distance.

Three Gisborne Gardens

Although not historic in themselves – the oldest being no more than 30 years old – three gardens in Gisborne reference the history of plant collecting in the region. The Banks Garden, Endeavour Garden and 1769 Garden each present an interpretation of that short period of plant collecting in October 1769 (Fig.2).

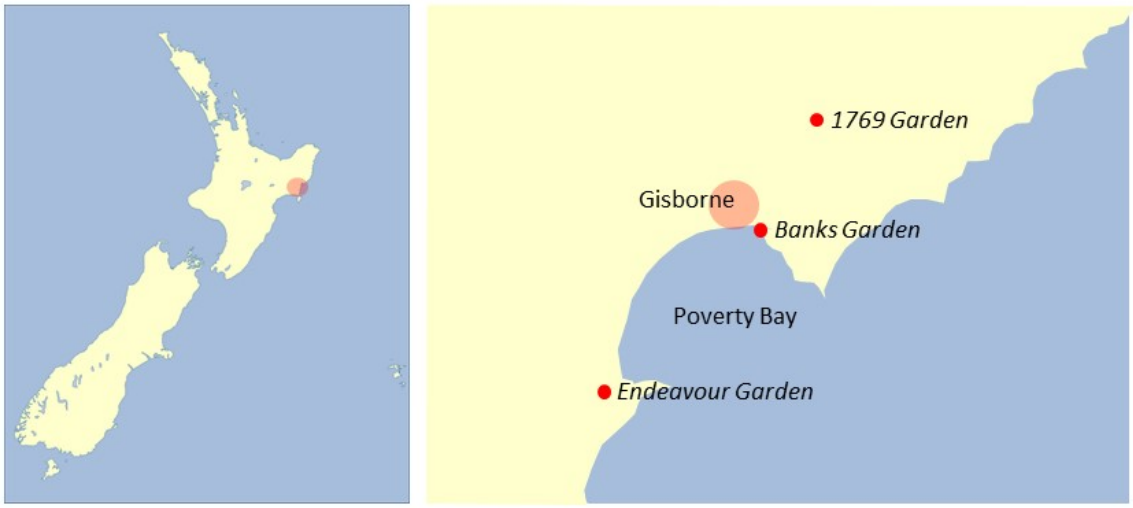

Figure 2. Location of the three gardens (drawn by author, based on map in public domain)

1. Banks Garden

The Banks Garden (Figs. 3 and 4) is the oldest of the three, and is at the Cook Landing Site, an historic reserve that includes an obelisk marking the site of where the Endeavour crew first came ashore, the place of first contact, the place of "Europe's encounter with Māori New Zealand."[7]

Figure 3. Banks Garden on the right, Photo Author 2, May 2018

Figure 4. Banks Garden (1), slight change in level through centre of site is the original shore line (2), and everything beyond this is reclaimed. In the middle distance are stacked logs on reclaimed port land (3), and in the far distance, Young Nick's Head / Te Kuri a Paoa, across Poverty Bay (4). Photo Author 1, from an earlier visit in May 2010.

On 9th October 1990 the Cook Landing Site was declared a National Historic Reserve and it came under the management of the Department of Conservation (DOC). Simon Smale, a DOC landscape architect, developed the landscape plan for the site and it is understood that this is when the Banks Garden was established.[8] The Banks Garden consists of a linear garden along the edge of the historic reserve area, with living specimens of the species that were gathered and listed by Banks and Solander. An overall explanation of the garden is provided, as well as small interpretation panels for each plant (Figs 5 and 6).

Figure 5. Interpretation panel for the Banks Garden, photo Author 1, May 2018

Figure 6. Example of a plant interpretation panel, Banks Garden, photo Author 1, May 2018

The Cook Landing Site reserve and the Banks Garden are being re-designed as part of the 250th Anniversary of the Endeavour's arrival. John Lucas from DOC (pers comm) explains that the existing Banks Garden will be tidied up for this year's celebrations, but eventually will disappear with the new plan. They intend to try and re-use as much material as possible. But the replacement of the 1990 Banks Garden with a new garden is in itself a further distancing, a purposeful deletion of the garden created at the time of New Zealand's Sesquicentennial, to commemorate instead the 250th anniversary of the arrival of the Endeavour.

2. Endeavour Garden, Orongo Station

Second is the Endeavour Garden, a private garden owned by an American couple, and not accessible to the public – we were not able to visit the site. The extensive Orongo Station was developed during the early 2000s, when American businessman John Griffin bought the land. The Endeavour Garden is based on a plant list obtained by the landscape architects from the Natural History Museum. In reply to the request from Nelson Byrd Woltz Landscape Architects, the Museum's senior curator advised that "Although the collections made in Australia by Banks and Solander are well studied, the New Zealand collections have received comparatively little attention. Indeed, while the Australian plants were apparently added to Banks' herbarium soon after their return from the voyage, the NZ plants were left unmounted until well after Banks' death."[9] He explained that although 40 plants were collected, because of this lag in attending to the collection, there is not a complete list, and sent the designers a list of the 32 plants that were known to have been collected in the area (Table 1). The approach to the garden is baldly described by landscape architect Thomas Woltz: "We got that plant list and made a perennial garden from it."[10] Woltz makes reference to using a pattern from Brazilian landscape architect

Roberto Burle Marx in relation to the design of the wetlands in the wider Orongo Station.[11] And in the Endeavour Garden it is undoubtedly Marx again (Fig. 7) who provides the inspiration, with the characteristic mono-species sweeps of planting (Fig. 8).

Clematis fosteri
Rorippa palustris
Cardamine debilis
Lepidium oleraceum
Geranium solanderi
Pelargonium inodorum
Oxalis perennans
Discaria toumatou
Corynocarpus laevigatus
Plagianthus divaricatus
Carmichaelia solandri
Sophora tetraphylla
S. microphylla
Coriaria arborea
Hydrocotyle americana
Scandia rosaefolia
Coprosma lucida
C. acerosa
Vittadinia australis
Lagenifera pumila
Cassinia leptophylla
Brachyglottis repanda
Senecio glomeratus
S. quadridentatus
Calystegia sepium
Solanum aviculare
S. nodiflorum
Myoporum laetum
Scleranthus biflorus
Sarcocornia quinqueflora
Tetragonia tetragonioides
Muehlenbeckia complexa

Table 1: Plant list for the Poverty Bay area supplied to the landscape architects for Orongo Station by the Natural History Museum, London

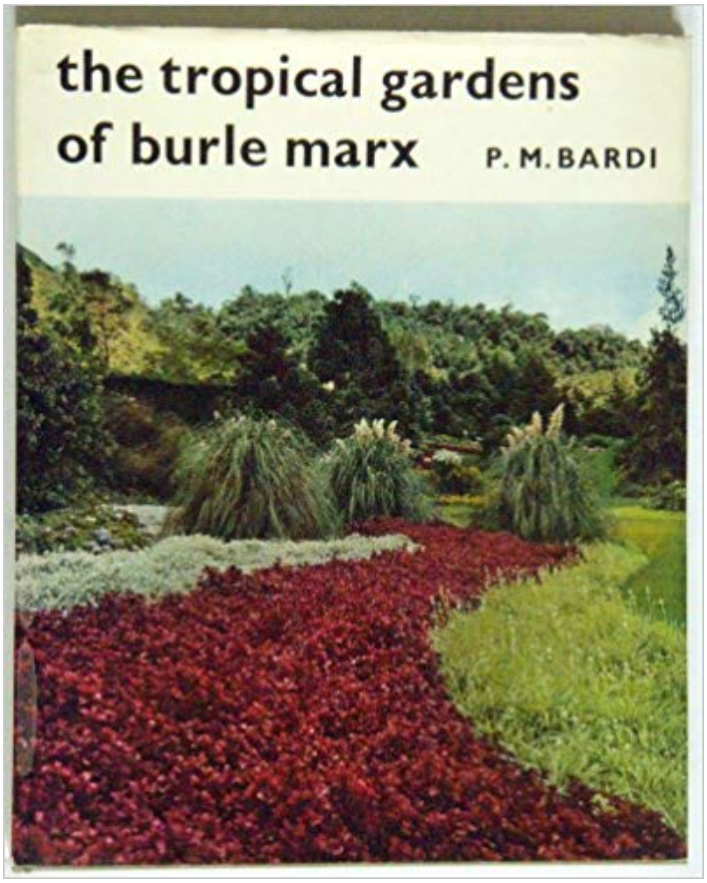

Figure 7. An iconic example of Roberto Burle Marx's approach to planting design, from the cover of the book P M Bardi (1964), *The Tropical Gardens of Roberto Burle Marx.* Architectural Press.

https://alastairgordonwalltowall.files.wordpress.com/2014/10/2012_orongo_272_med.jpg

Figure 8. "The Endeavor [*sic*] Garden (foreground) includes Cook's "scurvy grass" and New Zealand spinach, staples for Captain Cook's crew during their late 18th century voyage." Image: Marion Brenner (permission to be obtained, please follow link to jpeg).

3. 1769 Garden, Waikereru Eco-Sanctuary

Third, the 1769 Garden (Fig. 9) is being developed at the property of Dame Anne and Jeremy Salmond. Jeremy Salmond is an esteemed heritage architect and Dame Anne is Distinguished Professor of History at the University of Auckland, and has researched and written extensively about the history of Cook's voyaging, including the books *Two Worlds: First Meetings Between Maori and Europeans, 1642-1772* (1991) and *Tears of Rangi: Experiments Across Worlds* (2017). Gisborne is her home town, and making a garden here is a process that is steeped in history as well as concern for the wellbeing of the land and its people.

Figure 9. The 1769 Garden, photo Author 1, May 2018

The garden design is a collaboration between Philip Smith (02 Landscapes), Graeme Atkins (DOC, Ngāti Porou) and Malcolm Rutherford (QEII National Trust,[12] curator). Rather than using only the incomplete plant list from Banks and Solander as the basis for the garden, the intention is to echo an impression of the flora that the visitors would have experienced in 1769. As Alison Ballance reported, "Landscape architect Philip Smith says the 1769 Garden has been designed to give a series of impressions: for example, in 1769 the Europeans were greeted by a mass of yellow flowering kowhai, so the first plants that garden visitors encounter are kowhai."[13] The designers conceive of the garden as more than a representation of the plant collecting from 250 years ago, but as a future focussed refuge for endangered plants like *Clianthus spp.* (Kaka Beak) which is on the critical list nationally.

Planting is laid out not in a 'museum' format as at the Banks Garden, or in a formalistic approach as at the Endeavour Garden, but in a form that is of this place. The plants are grown within stone walls and mounds laid out in a quincunx grid, techniques traditionally used by Māori (Figs 10 and 11). This formation was noted by the Endeavour crew when they visited Anaura, just north of Gisborne, and William Monkhouse wrote of how the ground around the gardens was clear of weeds, and "…The Sweet potatoes are set in distinct little molehills which are ranged some in

straight lines, in others quincunx."[14] As in the work of Leatherbarrow et al,[15] the use of the forms at the 1769 Garden might be called a 'quotation', or it could be classified as a *'calque'*[16]. Designer Philip Smith explained that, "These stark pieces of geometry give it guts and relate to what part of landscape looked like in 1769."[17]

Figure 10. Stone wall planting, photo Author 1, May 2018

Figure 11. Stone mound planting in quincunx formation, photo Author 1, May 2010

Three Distances

The three gardens outlined above all approach responses to the plant collecting and classifying of 1769 in different ways. As well as these varied design responses, effects of distance are evident in the collecting, classifying and designing. Three distances are outlined here, as frames for considering the narratives of science and culture that inflect the plants and the gardens.

1: The Distancing of Science

The first distance comes with the arrival of science. Indigenous names for plants were supplanted by the Linnaean system, where taxonomy classified plants and animals into domains, kingdoms, phyla, classes, orders, families, genus, and species. The Linnaean system is now so familiar as a means of classifying the natural world that it is difficult to imagine it otherwise. However, like all systems of classification it is a type of language; a European language.

George Seddon critiques the Eurocentrism of science, particularly of classification, and observes that a system of taxonomy would have been very different if it had "developed from another culture, or another place, such as Australia or New Zealand, and yet still have served the needs of botanical science as efficiently at the system we now have."[18] This is because the logic behind the classification system is based on "a particular place at a particular time."[19] Linnaeus's *Species Plantarum* of 1753 used European plants which as the basis for classifying all plants. Therefore dominant plants in Europe, such as the Rose, are significant in the Linnaean taxonomy, but are of little consequence in Australia and New Zealand.

2: The Distancing of the List

As Salmond observed, "Banks and Solander wandered about in delight, collecting new species of plants in flower."[20] According to Banks's diary, 40 plants were collected in the Gisborne area, of which 32 have been identified. Because of the brevity of the Endeavour's visit to Gisborne, collecting was confined to a small radius, like dipping a small net into a large ocean. The plants that were listed became distanced from the remaining flora, transformed into exemplars of the region. This distancing is reinforced by two of the three gardens. At the Banks Garden, the plants from the list are set out like museum exhibits, complete with interpretative labels. And, as landscape architect Thomas Woltz explained, the Endeavour Garden was derived directly from the list obtained from the Natural History Museum.

Even the list itself is further distanced by the passage of time. As the senior curator from the Museum explained to the landscape architects, only 32 of the 40 plants that Banks noted can be confirmed. This means that nearly a quarter of the plants collected have fallen into a void created by the time taken to attend to the plant collections.

For the designers of the 1769 Garden, the intention is to capture an 'impression' of the flora that Banks and Solander would have encountered. The plant schedule for the Garden lists not just the 32 plants on the Natural History Museum's list, but 98 plants.[21] These 98 plants make up the more holistic sense of an impression, and the schedule manifests the distance between the plants on the 'Banks List' and the plants that grow in the area – highlighting how the almost arbitrary inclusion of the plants on the list has been petrified in the Banks Garden and the Endeavour Garden. Further, the assessment of baseline flora and vegetation carried out at Longbush

Ecosanctuary (adjacent to the 1769 Garden) identified 121 species in the area, emphasising the distance between the richness of the plant life in the area, and that on the list.

3. The Distance between Native and Exotic

New Zealand's geographic distance from other land masses is a primary reason for our distinctive native flora. This effect of distance and isolation is a theme which underpins the flora and fauna of Aotearoa New Zealand, as in the lecture by E J Godley, published in *Distance Looks Our Way.*[22] Godley, the Director of the Botany Division of the Department of Scientific and Industrial Research, drew attention to the geological history of the land mass which became New Zealand. While some plants may have crossed via land connections in the ancient past, Godley points out that many of the arrivals would have been across the ocean. He explained that the difficulties for seeds and spores to travel these distances "appear so great that the mind hesitates to accept the possibility of such improbable events. Yet true oceanic islands, which have never been connected to other lands, bear witness that trans-oceanic dispersal must have regularly occurred."[23]

Given New Zealand's isolation, and the apparent separation from other flora, the sense of native flora being a distinct and enduring set of plants tends not to be questioned. This uniqueness of the flora shapes wider narratives of distinctiveness and cultural identity.[24] Arguably, the botanising by Banks and Solander cemented the sense of a definitive New Zealand native flora. The plant lists, herbaria, and ultimately the Florilegium,[25] represent an epitome of indigenous flora, neatly classified and contained.

Yet, while the idea of native and exotic is seemingly binary, the distinction is more fluid. The definition of indigenous, of belonging to place, is transcended by geological and botanical time. Plants have moved, entire land masses have moved. Margaret Grose makes this point vividly by pointing out that the Common Beech, which is considered native to England, has been there for a shorter time than the Sphinx has been in Egypt.[26] In Aotearoa New Zealand, although it might be assumed that the plants present on the land mass now are our 'natives', fossils of plants related to ginkgoes, magnolias and liriodendrons have been found in areas of Canterbury,[27] presenting the paradox that these seemingly 'exotic' species were once inhabitants of this place. And, as Godley noted, oceanic dispersal might seem 'improbable,' but it is not impossible, and plants could have been carried here in the water or by wind. He describes how seeds and fruits of plants from Polynesia and the East Indies are occasionally found on Ninety Mile Beach in Northland. Were these to take root and grow, would they be natives or exotics?

While the categorisation of native and exotic is a botanical conundrum, and a reminder of the fluidity of plant movement, the terms remain powerful cultural symbols and can become significant in the design of landscapes. Native vs exotic evokes emotional associations such as belonging vs other, or familiar vs unusual. The three gardens illustrate how these categories are valorised and symbolised within the practice of garden making.

At the Endeavour Garden, landscape architect Breck Gastinger described native plants as "whacky,"[28] a word which conjures up a sense of oddness or eccentricity, and perhaps reflects the designers' view from distant America. At the 1769 Garden, Smith made a point of seeing the strangeness through the eyes of Banks and Solander. As Ballance explains, "Philip points out that Banks and Solander saw New Zealand native plants as exotic, so he has tried to create a sense of this in the plantings. As they grow larger, Philip says the heart-leaved kohuhu or *Pittosporum*

obcordatum, which has tiny leaves hidden in a tangle of twigs, will create shadowy columns that he expects most people will find surprising."[29]

Interpretations of the native flora as "whacky" or "exotic" resonate with George Seddon's observations about the early naturalists' perceptions of Australian flora and fauna, which they tended to regard as "aberrant."[30] He points to the naming of the platypus *Ornithorhynchus paradoxus,* as an example of this posing of the native as aberrant, and observes, "There is nothing paradoxical about the platypus, which is a highly evolved and well-adapted animal."[31] Seddon also notes how the naturalists' perceptions of black swans as strange was a product of Eurocentrism, and the presumption that how things are in Europe, where swans are white, is somehow the norm.

Just as platypuses are not paradoxical and the colour of swans depends on where you are, so too is the New Zealand native flora not "whacky" – it is how the flora is here. Smith description of how Banks and Solander would have considered the flora "exotic" is an articulation of the distance that comes from being an outsider – and the 1769 Garden explicitly works with this vision of the local plants as exotic. The Banks Garden too exoticises the native flora through placing it in a type of living museum, labelled and lined up in an invisible vitrine.

Beyond Gisborne

Gisborne was the Endeavour's first landfall in Australasia, and the three gardens bring into focus the first acts of collection and classification. However, they also landed in Tierra del Fuego, in several locations in the 'Society Islands' (Tahiti), around New Zealand and along the West Coast of Australia, Papua New Guinea, and Indonesia, gathering up a total of 30,000 plant specimens from the voyage overall.[32] A number of other designed landscapes respond to the gathering of plants by Banks and Solander, both in the locations of the plants collected, as well in remote locations (Table 2).

Name	Description	Location	Date
Joseph Banks Native Plants Reserve	Reserve focussed on Australian plants – no indication of following exact plant lists	Kareela, NSW, Australia	1969
Joseph Banks Garden	Located in the Cooktown Botanic Gardens and the Joseph Banks Garden is based on the plants collected there in 1770	Cooktown, Queensland, Australia	1970
Trailfinders Australian Garden	Chelsea Flower Show garden designed by Ian Barker, based on plants from the voyage of the Endeavour	Chelsea Flower Show, England	2011
Sir Joseph Banks Tribute Garden	Garden of 'rare' plants reflecting the collection – the modern varietals indicated a divergence from the original lists.[33]	Sir Joseph Banks Society, Horncastle Lincolnshire, England	
Solander Garden	Garden including some of the plants collected in Australia, adapted for the Canberra climate	Swedish Embassy in Canberra, Australia	2017

Table 2. Other known examples of gardens and designed landscapes created in response to the plant collecting by Banks and Solander

Conclusion

Three gardens in Gisborne / Tairāwhiti are intertwined with narratives of distance, sometimes unwittingly, and in other cases very precisely. The distance from Europe expands and contracts over time. Initially the delight in 'discovering' this new and rich flora expanded the sense of distance, as it was so markedly different from the familiar botany of Europe. Subsequently this distance contracted as the plants were subdued within the language of science, the European language of Linnaean taxonomy. The three gardens manifest this distance of science in various ways, even in the simple convention of placing the Latin or botanic name first, followed by the Māori and common names.

In the act of making gardens based on the list, and on the wider sweep of a botanical impression, the Endeavour's plant collecting is expressed as a landscape artefact. As with the 'Roberto Burle Marx' sweeps of planting in the Endeavour Garden, the species are thrown into contrast from the surrounding landscape, which paradoxically is the very source of these plants. The gardens have become a motif, an emblem of the botanising of the time. This is in turn becomes an act of 'future heritage' making at the 1769 Garden, with the concern for endangered species. And the potential erasure of the Banks Garden during the redevelopment raises questions over how we value such places.

Alongside the impact of the European language of science and classification is the distinction between nativeness and exoticness. Eurocentricism casts the indigenous species as strange and other, and the gardens navigate this differential in various ways. The 1769 Garden's overt framing of the indigenous species as 'exotic' amplifies how these categories are malleable, and can be used to inform the cultural narratives of place.

Three Gisborne gardens, none of them historic in themselves, manifest and trouble the distance between Europe and New Zealand. Over time and across space, distance has expanded and contracted through the actions of classifying, translating, quoting and designing. Each garden has responded to the collection of plants, in some cases petrifying the list, and in others building on the list to develop a robust future for the region's indigenous flora. The gardens prompt questions about the languages of science, ideas of region and place, and concepts of native and exotic.

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[33] "Tribute Garden – Garden Plants," *Sir Joseph Banks Society,* 24 March, 2019, https://www.joseph-banks.org.uk/garden-plants/