

Contents

7	<i>Acknowledgements</i>
9	INTRODUCTION
15	CHAPTER 1 Taming the Jungle
33	CHAPTER 2 The Jungle in the Parlour
51	CHAPTER 3 The Parlour Outside
69	CHAPTER 4 Natural Modernism
87	CHAPTER 5 The Garden Inside: The Villa Tugendhat, Brno
105	CHAPTER 6 Living in the Garden: Californian Modernism
125	CHAPTER 7 Natural Late Modernism
143	CHAPTER 8 The Living Room in the City: The Hyatt Regency Hotel, Atlanta
163	CHAPTER 9 The Benefits of Nature Inside
181	CHAPTER 10 Greening the Interior
200	<i>Notes</i>
204	<i>Bibliography</i>
216	<i>Index</i>
223	<i>Picture Credits</i>



CHAPTER 2

The Jungle in the Parlour

[T]he culture of choice plants in the greenhouse and the window, seem[s] to me more remunerative, both intellectually and morally, than even the study of the higher departments of art, because of their suitability to all tastes, and means, and their directly educative power, for they keep us near to nature and compel us to be students of the out-door world, whence many noble inspirations and devotional impulses are drawn.¹

Shirley Hibberd

Shirley Hibberd's words were written in 1856, at a moment when tamed nature – in the form of plants and flowers, not to mention fish in aquaria, caged birds and snakes in terraria – was moving from the attached conservatory into the urban middle-class home. Given that flowers died and plants demanded nurturing, the substantial commitment that this area of domestic life required from the nineteenth-century housewife meant that some form of compensation was clearly necessary. Hibberd and others fully understood the extent of the repayment that could be expected, and articulated it in their advice books.

Plants had first made an appearance in the modern home in the Netherlands in the seventeenth century. The Dutch obsession with tulips, both as growing bulbs and as cut flowers displayed in *tulipières*, has been described as 'tulipomania'.² Markers of wealth and social status, tulips had been so central to the Dutch economy that the tulip market's eventual collapse brought about a financial crash in the Netherlands in 1637. By the late eighteenth and early nineteenth centuries plants had begun to enter the homes of the wealthy in Britain. At Stourhead House in Wiltshire, for instance, Thomas Chippendale Jr. created an indoor planter in the shape of an Egyptian sarcophagus for Richard Colt Hoare to use in his library.³

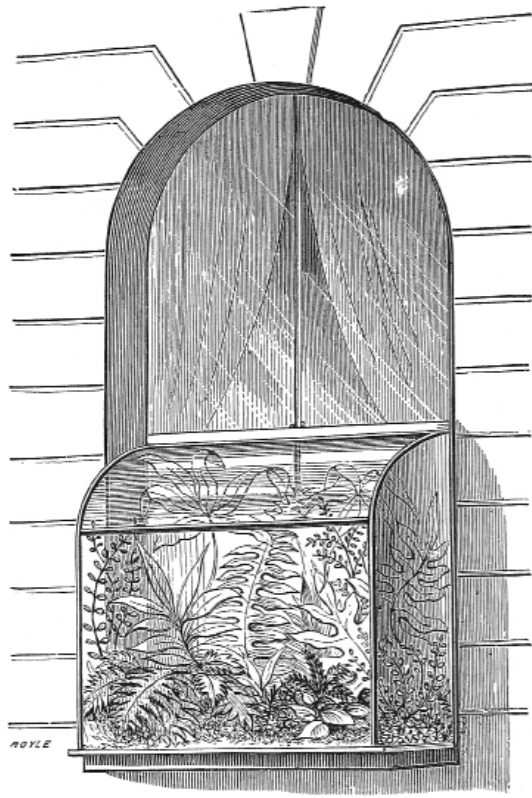


Fig. 14 'Ornamental Fern-Case Outside Window', an illustration from John R. Mollinson, *The New Practical Window Gardener*, new ed. (London: Henry J. Drane, 1894), p. 23

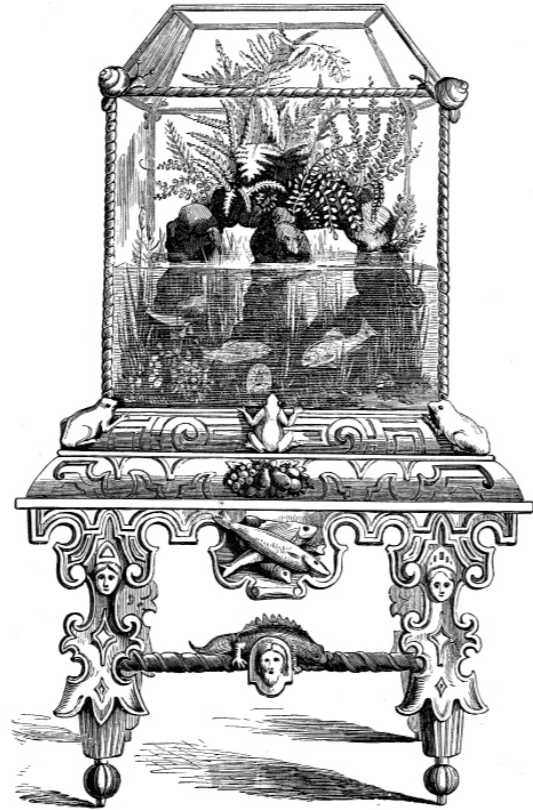


Fig. 15 'A Warrington Case with Filmy Ferns,' an illustration from John R. Mollinson, *The New Practical Window Gardener*, new ed. (London: Henry J. Drane, 1894), p. 97. The case combines an ornamental plant case with an aquarium



Fig. 16 Ludwig August Smith, *Interior with Mother and Daughter by a Window*, 1853. Oil on canvas, 18.7 cm x 16 in. Nationalmuseum, Stockholm

By the mid-nineteenth century industrialisation had made available an increasing number of furnishing and decorative items with which women could transform their middle-class homes into havens, safely separated from the outside world in which most remunerated work was undertaken by men. Much has been written about the subtle language of the interiors of the nineteenth-century urban and suburban middle-class home, emphasising the way in which its décor expressed its inhabitants' adherence to the fast-moving fashions of the day.⁴ Plants and flowers played an important part within that. Although plucked from the natural world, they rapidly became (near) cultural artefacts in the domestic context, extensions of the furniture and furnishings that surrounded them, and significant markers of aesthetic knowledge, or taste.

Plants and flowers softened architectural frames, lightened heavy furniture, provided decoration, elegance and refinement, acted as screens (ivy, known as the poor man's vine, was particularly important in this regard), and added colour, texture and scent. The plants that best survived

gas lighting and coal fires included aspidistras, which needed little light or space, dracaenas, described as 'a favorite with all fond of the plant decoration of rooms', rubber plants, some palms, robust ferns and cacti.⁵ The possibility of including plants and flowers in decorative schemes varied according to one's wealth and access to advice. If a family was unable to afford even a small conservatory, other ways of displaying plants and flowers inside the home were available to them. They included the use of enclosed boxes hung on to the exterior of windows (fig. 14), hanging baskets in porches and window bays or on balconies and verandas, fern cases (sometimes combined with aquaria; fig. 15), small pots on windowsills and mantelpieces or in cosy corners, ivy trailing over furniture items and walls (fig. 16), plants in pots on stands, and ferns displayed in fireplaces during the summer (fig. 17). Many versions of the Wardian case were developed for the home, while a wide range of other accessories, among them free-standing pots, plant stands, *jardinières*, *etagères*, wooden troughs with lead liners, and plant cabinets also facilitated the introduction of



Fig. 77 The Four Seasons Restaurant, New York, 1959. Photographer unknown

20-foot ceilings, trees 17 feet tall were used to make the necessary visual impact and to fit with the scale. Originally, four fig trees were introduced. Later azaleas and birch trees were used in the spring; philodendrons and queen palm trees in the summer; burnt-orange and yellow chrysanthemums and oak-leaf branches in the autumn; and white chrysanthemums and white birch trees in the winter. The planting scheme changed over the life of the restaurant and, at one point, blossoming cherry trees made an appearance.

Before Restaurant Associates, which was co-run by Jerry Brody and Joe Baum, made their pitch for the Four Seasons, they had worked on a number of other smart, themed restaurants, including the Hawaiian Room in the Hotel Lexington, which was appropriately decorated with palm trees and exotic plants. The Forum of the Twelve Caesars in the Rockefeller Center, on which they had worked with the interior decorator William Pahlmann, was another of their restaurant projects.⁸ In 2009 Phyllis Lambert recalled that, 'Philip and I went with Jerry Brody out to New Jersey and had a meal at his restaurant, where they gave us soup in profiterole bowls. Then we went to the completely over-the-top Forum of the Twelve Caesars, designed by Bill Pahlmann' (fig. 78).



Fig. 78 William Pahlmann looking through pattern books with Mrs. Walter Hoving, one of his clients, 1948. Photograph by Horst P. Horst

Brody and Baum had established the typology for luxurious, highly decorated, themed restaurants, the aesthetics of which were a far cry from the restrained, minimalist, yet also highly luxurious, approach advocated by Johnson for Mies's Seagram Building. But it appears that Brody and Baum had significant influence over the designs of the restaurants they worked on, and the Four Seasons was no exception. They undoubtedly suggested that Pahlmann, whom they had used on several of their projects, be brought in to help with the restaurant's interior design. As John Mariani and Alex von Binder later explained, Lambert and Johnson 'were convinced the arrangement [with Pahlmann] was not going to go smoothly as they felt that they were diametrically opposed in their attitudes'.⁹ It seems that Johnson and Pahlmann did dislike each other but, at a later date, Johnson was to claim that 'Pahlmann was very very helpful with the interior, especially with the table placement and kitchen layout'.¹⁰ The pool and the use of chairs based on Mies's Brno design in the restaurant were apparently Pahlmann's ideas.

Pahlmann had made his reputation in the inter-war years and the 1940s as a decorator of expensive homes, and his interior style was highly eclectic, combining traditional and modern styles. His move to the contract field

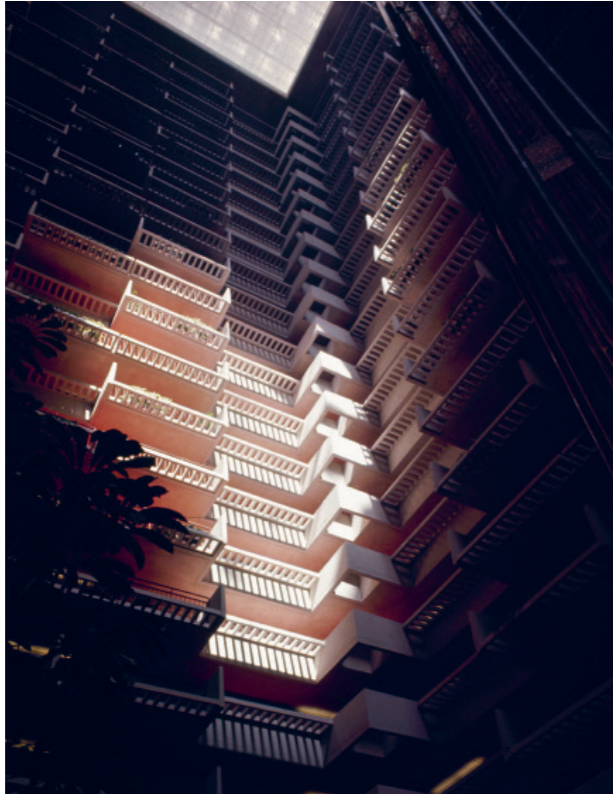


Fig. 90 Looking up through the atrium of the Hyatt Regency Hotel, Atlanta, designed by John Portman, opened and photographed 1967. Photograph by Alfred Eisenstaedt

off a parking lot, a strategy which had cleverly emphasised the height and openness of the enormous workroom inside, so Portman forced his visitors to enter the Hyatt Regency through a stark, low, dimly lit tunnel that added to their sense of shock at their first sight of the vertical, light, air-conditioned atrium topped by forty-seven skylights (fig. 90).¹⁸ The tunnel was, one commentator remarked, ‘a deliberate preparation for the visual surprise that will await the guest when he emerges at the end’.¹⁹ Visitors to the hotel in 1967 reported their gasps of surprise as they entered the atrium.²⁰ Some dubbed it a ‘fabulosity’ and others ‘the eighth wonder of the world’.²¹ Both *Life* and *Time* magazines ran celebratory features about the hotel when it opened, and the renowned architect Edward Durrell Stone flew into Atlanta especially to see it – and straight back out again afterwards.²²

Visitors’ senses were clearly bombarded by the huge space they encountered when they entered the atrium. The journalist writing in *The Atlanta Journal* in 1967 described that dramatic void as follows: ‘On all four sides rise the vine-covered interior balconies of the rooms, while the elevators move up and down on their shafts in full view like



Fig. 91 Frank Lloyd Wright, Fallingwater (the Kaufmann Residence), Pennsylvania, completed 1935. Photograph by Allen Brown, 2017

gems on a necklace.’²³ Six Australian umbrella trees, each 30 feet high, and numerous other plants and flowers – including chrysanthemums and the climbing philodendrons that flowed from the balconies – combined to create visitors’ first impressions as they exited the dark tunnel. Once again Portman was making a connection to the work of Frank Lloyd Wright, this time to Fallingwater, his 1935 house in Pennsylvania (fig. 91) designed for the Kaufmann family, the large cantilevered terraces of which had sumptuous vines growing over them. Even earlier links can be made to Greene & Greene’s Gamble House (see Chapter 4), where vines flowed down the façade, linking the building to the garden below. Given that the built-in concrete planters were embedded in the structure of the building, the vegetation that Portman introduced into the Hyatt Regency must have been an integral component of his architectural vision, rather than a decorative afterthought.

Anticipating Aldo Castellano’s later description of Entelechy II, in 1967 an Atlanta journalist described the Hyatt Regency atrium as ‘a total explosion of space’. He added that the Hyatt Corporation had bought ‘the idea of the grandeur of space’.²⁴ The Hyatt Regency was a new kind of hotel, one that

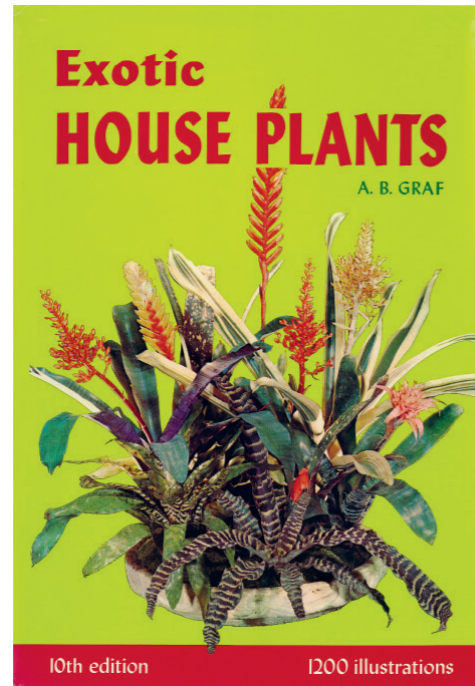


Fig. 98 The front cover of A. B. Graf, *Exotic House Plants*, 10th ed. (East Rutherford, NJ: Roehrs, 1976)

plants represented a new form of exploitation of the natural world for economic ends. Of course, the growing number of nurseries that supplied indoor plants and flowers, and the indoor landscapers who installed and maintained them, also benefited from the expansion of their businesses.

On the back of this growth emerged a new profession, which was increasingly referred to as ‘interiorscaping’ or ‘plantscaping’. While its practitioners were initially self-taught, formal educational systems were soon established. In addition to the members of architectural and landscape firms who worked on indoor foliage, several other individuals began to thrive as plantscapers. Everett Conklin was among the early pioneers, as was the New Jersey-based Roehrs family. Having started out in orchid-growing, the family had formed a business in 1869 and, by the early twentieth century, was running one of the largest nurseries supplying plants for indoor purposes. In the 1960s Julius Roehrs went to work in the Kentia palm industry in California. The Roehrs company also published books by the tropical-plant authority Alfred Graf (fig. 98), one of whose many claims was that the practice of bringing plants into the workplace had begun when women entered it (fig. 99).²

In 1974 an American landscape architect named Nelson Hammer convinced The Architects Collaborative, a company for which he was working at the time, to employ Conklin to help them install a lobby garden



Fig. 99 Natalia Danesi Murray (left), director of the American branch of the Arnoldo Mondadori publishing house, in her New York office with her secretary, 1955

in a hotel in the Middle East.³ While working for Dan Kiley a few years earlier, Hammer had become familiar with Conklin’s interior landscaping at the Ford Foundation Building. He learnt a great deal from working alongside Conklin on the Middle East project, and afterwards went on to undertake a number of interior-landscaping projects himself, claiming that his main learning method was ‘trial and error’.⁴ By 1992, though, he was able to observe that there were ‘several excellent books and two national magazines devoted to the subject’, as well as a number of university courses. Both developments suggest that plantscaping was beginning to acquire a serious professional profile.⁵

Richard L. Gaines’s *Interior Plantscaping: Building Design for Interior Foliage Plants* (1977) was one of the earliest books to lay out the principles of the new professional practice.⁶ As the author explained, the terms ‘interiorscaping’, ‘interior landscaping’ and ‘interior plantscaping’ were used interchangeably at that time, though he personally favoured the last.⁷ The main problem to be addressed, in his eyes, was the gap between the interior-landscaping industry, with its horticultural knowledge, and the design profession – architects and interior designers, in particular – which, up until that point, had tried to develop plantscapes on its own. While interior landscapers understood plants’ needs but had no real design skills, claimed Gaines, designers did not understand the principles of what he called ‘plant



Fig. 104 A variegated dracaena (*front*), philodendron (*rear*) and other indoor plants in a container at the landscaped office of the Swiss Banking Corporation in Basel, 1970s. Photographer unknown



Fig. 105 Potted plants and cut flowers help enliven an open-plan office, 1970s. Photographer unknown

United Kingdom, Norway, Sweden, Japan, the Netherlands and China, among other countries, and the results were published in global academic journals.³¹ Hard evidence was needed not only to justify the funding that went into the research, but also to reassure all those who wanted to invest in plantscaping that it paid for itself, either indirectly by creating efficiencies, or directly by resulting in financial profit.

The experiments focused on a range of specific interiors – including offices, hospitals and prisons, and, a little later, hospitality and retail spaces – in which well-being was an important issue. Since the 1960s plants had played an important role in what was described at that time as the landscaped office, or *Bürolandschaft*, a concept developed by a German space-planning firm called Quickborner (figs 103–5). The firm was owned by the brothers Wolfgang and Eberhard Schnelle, who had set out to create an office system that functioned on a human scale and was more flexible than the hierarchically arranged rows of desks that had previously been the norm.³² A range of plants, including dracaenas, philodendrons, yuccas, weeping figs, Kentia palms, umbrella trees, fatsias, rubber plants, Swiss cheese plants, ivies and bamboos were introduced into landscaped offices. They served multiple purposes, including absorbing noise, replacing partitions, providing a level of privacy and acting as directional signs, and played several aesthetic roles, among them creating focal points, filling voids, and adding colour, texture and warmth.

In the early 1960s the German project came to the notice of an American researcher named Robert Propst, who was working along similar lines for the Herman Miller company in the United States. In 1964 Herman Miller launched a new concept called ‘Action Office’, on which Propst collaborated with the designer George Nelson. The first Quickborner office landscape in America was created for Dupont in Wilmington, Delaware, in 1967.³³ Subsequently, plants played an important role in numerous office projects across the globe that emulated the work undertaken in Germany and the United States (fig. 106).

Serious research on the effects of plants in offices began in the early 1970s. By 1978 Conklin was able to claim that ‘attitudes in the planted office seem to indicate individual and collective morale very much improved and absenteeism considerably down’.³⁴ At that time the energy crisis was forcing builders to turn to more efficient products for construction, and office buildings were being hermetically sealed. The new materials that they used contained toxins that led to a multiple-symptom disorder in office workers known as ‘sick building syndrome’. As a result, in addition to the work being done on plants as stress relievers, research was also undertaken to address their capacity to combat air pollution.

Research on the effects of plants on office workers continued into the 1990s. In 1993 Rachel Kaplan reworked her ideas about ‘nearby nature’ and ‘mental fatigue’.³⁵ Her rather vague conclusion was that: ‘To be able to glance up from one’s work and experience bits of nature is likely to be

tall, which had been transported to New York from California. As Martin Gottlieb explained in the *New York Times*, that particular species was 'chosen for its monumental quality, lushness and elegant trunk'.²⁵ Ten storeys high, the atrium was designed by Pelli in collaboration with his wife, the landscape designer and environmentalist Diana Balmori, who created the winter garden. The terrorist attacks of 11 September 2001 seriously damaged the site, but the original 1988 space was reconstructed in the following year. Although linked to the Financial Center, the space is dedicated to culture, hosting concerts, ballets and art exhibitions. The drama of the towering palm trees reinforces the immersive and emotive capacity of nature inside, as well as animating the otherwise static, late-modern steel-and-glass architecture that encases them. Some years after the atrium opened, the original palms grew too tall for the space and had to be replaced with smaller ones.

In Europe, the vast glass dome of Basel-Mulhouse Airport's Skyview Lounge (2005) also covers a number of exotic palms and a calming pool of water, introduced to alleviate the stress of the anxious travellers who pass time there.²⁶ The Knockbrea health centre in Belfast (2008) also features a palm tree in its central, naturally lit atrium. The aim is to provide a life-affirming and soothing waiting area for patients. Other trees were also brought into buildings to great effect in the first decades of the twenty-first century. As mentioned in the Introduction, in 2011 the wedding of Prince William to Catherine Middleton in Westminster Abbey, London, was enhanced by the addition of four tons of foliage. The aim was to recreate a 'lavish English country garden'.²⁷ It was an example of pure theatre, choreographed by the event's 'floral artistic director', Shane Connolly.²⁸

Norman Foster + Partners have introduced trees into several Apple stores across the globe (fig. 116). The Singapore store, opened in 2017, was built on Apple Orchard Road, a former site of fruit and nutmeg orchards, which inspired the store's green theme. Singapore's status as the greenest place in Asia also influenced the design. Eight mature trees create a shaded 'green orchard' outside, while, inside, twelve weeping fig trees form what Apple calls its 'Genius Grove', a replacement for the 'Genius Bars' of earlier stores. It was included, the Foster office claimed, not only for the strong visual aesthetic but also to 'stimulate all human senses – enriching the temperature, the smell, and the aural qualities of the space. It creates an oasis of tranquillity in the busiest part of the store.'²⁹ The doughnut-shaped planters double as seats for customers.

In addition to the dramatic inclusion of full-size trees in indoor settings, many of the most powerful and memorable plantscapes that appeared in the decades around the turn of the century were large indoor gardens. Madrid's Atocha railway station, which was reconstructed in 1992, contains a full-scale botanical garden and turtle sanctuary. Over 7,000 plants and trees, representing over 260 species, cover an area of 13,000 feet. A swamp, filled with Malabar chestnut trees, occupies one end. Foster + Partners'



Fig. 116 Weeping fig trees are used to make indoor groves at the Apple store on Regent Street, London, designed by Foster + Partners, completed 2016. Photograph by Alena Kravchenko, 2017



Fig. 117 The indoor roof garden at Crossrail Place, Canary Wharf, London, designed by Foster + Partners, completed and photographed 2015. Photograph by Jim Dyson