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Prologue

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**Prologue**

'Australians should be growing more plants from their own country in their gardens’. That is the theme of this book, and it is one that I endorse warmly. But why? The case has been argued in the past from a mixture of good reasons and bad, and this has resulted in some good gardens and some very bad ones; lemon-scented gums pushing into the foundations of valuable nineteenth-century terraces in their minute front yards in the inner suburbs of Sydney and Melbourne, for example.

The bad arguments led twenty years ago to a belief that the ‘bush garden’ was self-maintaining: you bought the plants, put them in the ground, and your task was over. Neither gardener nor plants are like that, nor have ever been, but the failures may have set back by a decade or more the campaign to persuade Australians to grow more plants from their own country. So before we begin planting, let us first turn to a little weeding; some of the arguments we have heard are overstated, need qualification, are incomplete, or in conflict with other beliefs, and some of the terminology is imprecise or misleading. Then we can turn to the good arguments based on knowledge, experience and understanding, the substance of this book.

I. Australian Plants

To write or speak of ‘Australian plants’ is to use a convenient fiction, sometimes useful, sometimes not, leading to serious confusions. The term has its uses, but its use always requires caution. The caution is needed because plants know nothing of nationality. *Nations and nationality are the outcome of political history, of conquest, invasion, change, chance, all of which might, in our own case, have led to quite different boundaries. The French might well have claimed the western third of the continent, the Dutch Van Diemen’s Land, the Germans and the Dutch or the Indonesians or the Japanese, the northern third of the continent. So the words ’Australia’ and ’Australian plants’ might have applied only to the land and flora of the south-eastern mainland.*

The nation of Australia, however, now comprises a continent, the only nation state to do so. Thus the political boundary coincides with a natural boundary, with the exception of a few bits and pieces that will come to presently. This colours our thinking in many odd ways, usually unconscious. North America has eight nation states plus Greenland (Danish) and another five Caribbean countries, just counting the larger ones, while all the other continents have many more. Yet our continental unity is also misleading; it encompasses many highly diverse environments and the plants from one often fail survive in another, although there are also many interesting exceptions, discussed later.

Europe is called a continent, even THE Continent (although strictly a mere subcontinent of Asia, like India). Now that the political boundaries grow close to the natural ones by courtesy of the European Union, we could be tempted to speak of ’European plants’ and urge that these should dominate European gardens. But of course we do not, for two very good reasons. One is environmental and one cultural. The cultural reason is that gardens are human constructs, and Europeans have ransacked the world for ’garden-worthy’ plants, and then bred and refined them.

The second is ecological. *Quercus suber*, the cork oak, is indigenous in Portugal and southern Spain, but there would be little point in planting it in Finland, nor in planting birches in Portugal, although both are European plants and European countries. It is common enough in our gardening literature to see statements like ’Australians should plant Australian plants in their gardens’. There is no moral imperative. Nationalism of this kind belongs essentially to the nineteenth century. It makes no sense either horticulturally or ecologically.

Plant affinities often ignore national boundaries. They may also ignore natural boundaries. For our region, the most significant natural boundary is Wallace’s Line, the dramatic gap in the Indonesian Archipelago between Lombok and Flores, dividing the biotic realm of South East Asia and Australasia. It works well for the fauna (tigers and monkeys to the west of it, kangaroos and their kin to the east) but less well for the plants. The flora of Australia has many shared characteristics at the continental scale, but there are also many plant species and genera that ’look outwards’ rather than inwards to the centre.

Popular speech reflects this sense of a continent and a people looking out from the coastal fringe rather than inwards. It makes sense to speak of the ’American heartland’, a powerful political and cultural force, but here the heart is dead. We call non-coastal Australia ’the outback’, and if it is well out, ’beyond the black stump’. What it is not is ’in’. We even define ourselves by the oceans we face. Sydney fronts the Pacific, Perth the Indian Ocean. America and Europe have *transcontinental* railroads. We have one too, but we call it ’The Indian Pacific’, ocean to ocean.

Many plants look out across these seas. Kangaroo grass (*Themeda*), which we think of as quintessentially Australian, is common in southern Africa, as I once discovered to my surprise. The distinctive boabs (*Adansonia*) of the Kimberley have close relatives in Madagascar and southern Africa, but none in eastern Australia, while some of the evergreen figs of tropical and subtropical Australia have their nearest relatives in India. Tasmania has a suite of gymnosperms that are unknown in south-western Australia, but with related species up the east coast, across the Tasman to New Zealand and even further to Chile. The greatest concentration is in New Caledonia. To give a few examples, we have one species of kauri (*Agathis robusta*) on the east coast of Queensland, and New Zealand has one (*A. australis*). We have three *Araucaria* (*A. heterophylla* from Norfolk Island, *A. bidwillii* and *A. cunninghamiana*) while New Caledonia has many species of these two genera, especially *Araucaria*. The western four-fifths of the continent has none. Tasmania has *Dacrydium franklinii* (the Huon Pine), *Phyllocadus asplenifolius* (the Celery Top Pine) and *Microcachrys tetragona*, all members of the Podocarpaceae; most of the related species are in New Zealand.

All of this is the outcome of the geological past, Gondwanan links, including linkages through a more temperate Antarctica, chance seed dispersal by birds or waves, and so on. The point is that the current geographical location of plants in Australia may provide only limited significant information. To talk of ’Australian’ plants is therefore accurate and tolerably precise only if it is intended to mean no more than those plants now growing naturally in Australia. Even then we have to exclude recent introductions that have naturalised. We also have to exclude the concept of ’Australian Christmas’, Heard and Macquarie Islands, which includes Norfolk Island, Tasmania, Rottnest, Kangaroo Island and so on, by criteria that are obviously quite arbitrary, since if we restricted ourselves to the Australian continent, they would all be out too. Beyond that imperfect geographical sense, the word ’Australian’ applied to plants is a joke, sometimes rich in meaning, sometimes poor and misleading.

The danger of confusing political with natural boundaries can be illustrated with birds which, like the plants, know nothing of nationality. The kookaburra is an alien in Western Australia introduced from the eastern seaboard, and much hated by bird lovers. It is a rapacious predator, more disposed to eat the eggs and nestlings of the indigenous birds which have a different evolutionary past and are not adapted to its presence than it is to eat the lizards and snakes of popular illustration. Birds know nothing of the nationality of plants, either. My wife and I treasure the singing honey-eaters in our garden. Their preferred winter food are the abundant red pea flowers of the big old coral tree, *Erythrina cf. indica*. That it is an exotic is of no concern to the honey-eaters.

There is, however, a strong case for using plants from your immediate locality (literally indigenous plants, a term that Diana Snape uses with precision). Such plants are likely to need no or little supplementary watering, immensely important as water becomes an increasingly scarce
resource. They are adapted to local soils and should rarely need the mineral fertilisers that lead to the excess nutrients befouling our waterways. They are usually resistant to local pests and are therefore less demanding of toxic pesticides. This alas, is not always the case. There are few general statements in either horticulture or ecology that do not admit of exceptions. Where plant breeders are able to cross two related species (F1 hybrid) offspring are rather stunted, however, the new hybrids plant species possessive breeding within a given species, aiming for showy flowers or a longer flowering season. The resultant cultivars may need more care in the garden than in more nourishment, more nutrients, more water—and of course they are not necessarily resistant to all the plant pathogens and predators we have introduced into the garden environment, especially in the towns and cities where most of us live.

A second and powerful reason for using the plants of your own locale is that they cannot become ‘garden escapes’, by definition. In one sense, that of the last paragraph, it is wise to use plants, whatever their source, adapted to your immediate environment (soil, rainfall, hours of sunshine, temperature range). Thus plants from comparable Mediterranean zones in the other continents are generally well suited to southern Australia, but these are also the plants most likely to become invasive (feral, if you like). Bulbs and corms from southern Africa are amongst the worst, but there is a long list, rapidly getting longer, of introduced plants that are invading the bushland of south-western Australia, and many are now out of control. This problem cannot be seen in new setting. One well-known case is Pittosporum undulatum from Gippsland, now regarded as a serious invasive weed in the Dandenongs, where it is not indigenous. But if you live on the coastal limestone in Fremantle, as my wife and I do, your garden Templetonia or Spiryrium might yield seeds that are spread by birds, but if they grow they will be indistinguishable from the survivors still to be found in adjoining pockets of bushland.

A third reason for experimenting with Australian plants in the garden is the love ‘em or lose ‘em’ proposition, of which the Wollemi Pine is a spectacular example. It has been found in two small and almost inaccessible natural habitats in the Blue Mountains, but is now being busily propagated in a Queensland nursery, to be released shortly to the gardening public. This is an interesting case, in that the ‘conserve biological diversity’ argument runs head-on into the purist approach to environmental conservation. For instance the anti-Pittosporum case in the Dandenongs is essentially an argument against the increasing homogenisation of the natural world and the blurring of the distinctive characteristics of specific habitats. The outcome, however, is beyond doubt: the Wollemi Pine will sell like hot cakes, and will be tried all over the place (if I were younger I would be tempted to try one myself, since Podocarpus elatus does so well here in Fremantle, so far from ‘home’!).

There are similar examples from the western side of the continent. Some of the Mountain Bells such as Darwinia collina, D. leiostyla and D. macrostegia occur only on one or two peaks in the Stirling Ranges. Another example of a valuable and beautiful plant with a very limited natural distribution is the Quall Bell (Pimelea physisodes). All of these are vulnerable. They are not yet common in cultivation, but Eucalyptus ficifolia, the Red-Flowering Gum, does so well in southern Victoria that it is sometimes called the Melbourne Gum. It is restricted naturally to a small area in the extreme south-west of Western Australia that gets some summer rain. Its distribution has been pushed steadily southwards as the climate has become drier over the last ten thousand years and it will be pushed right off the edge of the continent if this trend continues, as is generally predicted. The western half of the continent runs out of south too soon for further migration, whereas southern Victoria offers good habitat and it is from its southern edge that many of our best Australian plants have spread. Some of these are now being sold as ‘blended gardens’. She adds that all gardens that include ‘Australian’ species, they might have moved to Victoria of their own accord!

Many plants are increasingly vulnerable in the natural environment, for a whole raft of reasons, of which limited natural habitat is only the beginning. Increased frequency and intensity of fire and clearing for agriculture have had a massive impact. In areas of pastoral household, which take up a third of the continent, stretching from the Pilbara and the Kimberly across to north-west Queensland and western New South Wales, selective grazing and trampling by sheep, cattle, goats, donkeys and camels have eliminated or threaten many species. In southern Australia, garden escapes often out-compete the indigenous flora, and there are also introduced insect predators and pathogens, of which the worst is Phytophthora cinnamomi. Dieback has done immense damage in some of the floristic treasure houses of Western Australia such as the Stirling Ranges and the Fitzgerald River National Parks. These are especially at risk (jarrah die-back is a misnomer) so if you live on the Mornington Peninsula and can grow Banksia coccinea (not easy, but I have seen it growing there) you will be rendering a service to posterity. So the ‘love ‘em or lose ‘em’ argument can be compelling.

A fourth reason for growing ‘Australian’ plants is that it is fun. Gardening is rewarding when it is experimental: there is not much chance in growing petunias, but there is in growing Leschenaultia formosa. I have seen some strikingly successful experiments in the Snape’s own garden. For example Diana and her husband Brian grow and flower several species of the prostrate banksias from the south coast of Western Australia. They are not ecologically appropriate so they have recreated a suitable environment by importing a mound of free-draining sand. This is exactly what traditional gardeners do–artificially recreate the conditions that are natural for the plant, be it a rhododendron or a cattleya orchid. Success has come through skilled gardening. So the lovely little banksia cones enrich their manufactured environment thousands of kilometres from their natural home, but nonetheless both a delight and a triumph.

Sometimes Australian plants are surprisingly versatile and can be grown in a wide range of environments, even though their natural habitat may be severely restricted. An extreme case is the Norfolk Island Pine ( Araucaria heterophylla) which has been grown almost right around the coast of temperate Australia from Brisbane to Geraldton and beyond. The Silky Oak (Grevillea robusta) and the Geraldton Wax (Casuarina cunninghamiana) are other examples. Sometimes the Silky Oak comes from coastal Queensland, and in the coastal south of Western Australia. They are not ecologically appropriate so they have recreated a suitable environment by importing a mound of free-draining sand. This is exactly what traditional gardeners do–artificially recreate the conditions that are natural for the plant, be it a rhododendron or a cattleya orchid. Success has come through skilled gardening. So the lovely little banksia cones enrich their manufactured environment thousands of kilometres from their natural home, but nonetheless both a delight and a triumph.

So there is great scope for experimenting with Australian plants from environments remote from our own, so long as we remember that this is not different in kind from trying to grow roses or Chilean bell-flowers. Strictly speaking, the banksias in the Snape garden are exotics. In the main text, to follow, the author has an outstanding section on garden styles, in which she quite properly distinguishes between indigenous gardens, using local plants only, and ‘blended gardens’. She adds that all gardens that include ‘Australian’ species, they might have moved to Victoria of their own accord!

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Apart from the pleasure of successful experiment there are other reasons for wanting to grow Podocarpus in Fremantle so far from its natural habitat. Were we to grow only the plants indigenous to the limestone hill on which we live, we would be restricted to heathland plants. We do have them, too, abundantly: Cockies Tongue ( Templetonia retusa); Melaleuca acerosa with its gorgeous yellow flower heads; and Native Daisies ( Melaleuca and Eucalyptus) that should be used much more widely. A plant like Banksia menziesii is particularly beautiful and misunderstood and so on. But for trees, only Callistemon, of which there are about twenty, and Melaleuca lanceolata, which prefers more shelter than we can provide. We need more trees, some for shade and privacy and others chosen for design or functional considerations; some deciduous to allow winter sun and summer shade, like the old mulberry and several coral trees (Erythrina indica) with its red pea-flowers bright against the winter-blue sky. (There are two species of Erythrina indigenous to Australia–E vespertilio and E.pilforcarpa–so perhaps this one from India can be allowed in under the ‘family reunion’ clause.)

In any case the mulberry and the coral trees were here when we bought the house and are part of its history. We have introduced other
Fred Williams the landscape painter par excellence broke with this painterly convention by painting strip pictures, his contention being that the photographs of landscapes, even of the viewfinder of the camera, are not that of a static composition seen through a picture window. Such gardens are to be enjoyed from a preferred viewpoint, with all appropriate model (although that does not mean that you cannot follow that model and yet include indigenous plants). A naturalistic design will be attractive to the open space, usually under grass, is well suited to the needs of children, dogs, family life.

Australia, through most of Victoria, and then north through New South Wales and southern Queensland west of the Divide. This, along with the unknown in the Australian bush, where fire is rarely local. Away from the coast, moreover, forest soon gives way to grassy woodland, heath, grassland or shrub steppe. If you are intending a naturalistic use of indigenous plants, therefore, the ‘clearing in the forest’ is not an option, as in front gate to front door, anything but a straight line is perverse. The same holds for the driveway unless you have a very large block.

The social context also includes the neighbourhood. If you live in one of the older suburbs, for example, there’s likely to be an overall likeness between at least the front gardens, and perhaps good manners might suggest that you respect this. You can dare to be different, of course, and could find yourself a trendsetter, but at least you should give the overall context some thought. What is rare and valuable in the Snape block, however, is that despite her strong preference for the ‘informal’ she nevertheless offers constructive detail about the Australian plants that will withstand clipping to make satisfactory geometrical shapes and plane surfaces. You don’t have to use Buxus sempervirens: there are Australian alternatives.

Strong light intensities prevail in much of Australia, and especially in the southern sweep from south-western Australia across all of South Australia, through most of Victoria, and then north through New South Wales and southern Queensland west of the Divide. This, along with the need to conserve water, has led to adaptive consequences in the natural environment, and they are significant for design. Foliage is often fine, sometimes very fine, as in nearly all the plants of the heathlands (Micromyrtus, for example).

The colour range is highly distinctive: grey, grey-green, blue-green, black-green, and then translucent copper reds in the new flush of growth (because in nutrient-poor soils, the production of anthocyanin outstrips that of the more nutrient-demanding chlorophyll). Foliage is often pendant and tough (sclerophyllous) as a protection against insolation; prickly or harsh as a protection against grazing and browsing animals. Foliage is often resinous, too, a fresh fragrance to our Australian noses, but a deterrent to many insect predators. The flowers may be exserted to wall, even the Banksia cones made up of a multitude of small individual flowers. The flowers are often rich in nectar; stamens, like tiny pin-cushions, but poor in petals. In less brilliantly lit climes, large petals guide the fertilising bees and moths to the functional core of the flower, stamens and stigma, but such crude traffic signals are rarely needed here. Our flowers are often rich in honey, too, easy to manufacture in a sun-rich world.

What we do not commonly find in this world of the sun are plants with large mid-green leaves, wilting as soon as their water-filled cells are depleted; nor large flowers like those of, say, the rhododendrons, and prolific to the point of covering the bush or tree, going all out to get fertilised in their native mum. I have seen groves of rhododendrons growing under sheltering deciduous trees in Bodnant, one of the great gardens of the British Isles. The flowers glow like jewels in the low light. If you were able to grow them in Bendigo you would need to keep them under a humidifying spray through the summer and they would look gross, lacking all decent restraint.

The point I am making is that such foliage, such flowers, look out of place in much of this country, not just horticulturally and ecologically, but visually. Of course there are exceptions like Mount Macedon and Mount Wilson—but they are indeed exceptions. By contrast, designing with a palette of indigenous plants can allow a subtle harmony of all the foliage colours listed above, and more; some are very pale grey, almost white, like Leucophyton (Calocephalus) brownii and some of the Emu-bushes (Eremophila spp.), and are good for accent or contrast, just as the black-greens are so good for giving solidity, anchoring a composition that might otherwise etherealise in the heat-haze and float away.

Gardens must serve all kinds of people, with differing needs in different places, so it is wise to be prescriptive about design. A common design model in suburban Australia is with all the clearing in the forest, a lawn opening out from the rear of the house, backed by a half circle of shrubs and trees. When much of Europe was densely forested, a clearing gave some security–approaching predators could be seen in advance. The study of human behaviour in such settings has led to the ‘prospect and refuge’ hypothesis (Appleton, 1975): that people going for a picnic in a park, for example, will generally choose to sit, neither in the middle of the open space, nor in the encircling trees, but at the edge, exhibiting a behaviour pattern that has a long ancestry. We have inherited this design model, along with much else, from Britain, and it suits us, perhaps for pramal reasons (it offers a comfort zone), but also for more practical ones: the surrounding trees give privacy, while the open space, usually under grass, is well suited to the needs of children, dogs, family life.

Natural clearings in the forests of western Europe were usually the outcome of lightning strikes and local fire, but such clearings are almost unknown in the Australian bush, where fire is rarely local. Away from the coast, Austroeur, forest soon gives way to grassy woodland, heath, grassland or shrub steppe. If you are intending a naturalistic use of indigenous plants, therefore, the ‘clearing in the forest’ is not an appropriate model (although that does not mean that you cannot follow that model and yet include indigenous plants). A naturalistic design will not be that of a static composition seen through a picture window. Such gardens are to be enjoyed from a preferred viewpoint, with all those formal elements so deeply embedded in our culture: foreground, middle ground, background, asymmetric framing elements on each side, ‘a picture’ more or less conforming to the golden mean of the Greeks—which is roughly the proportion of most paintings, most photographs of landscapes, even of the viewfinder of the camera.

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Australian landscape is often a seamless continuity rather than a series of set views. Naturalistic gardens using Australian plant material also break with this convention, but in a different way; they will be intricate and dynamic, not static. Diana Snape writes of 'Walkabout gardens', a good term. They can be quite small, like her own. You move around them, apparently at will, discovering hidden treasures, and the scale of attention is often minute. You are constantly tempted around the next corner, all apparently artlessly, although of course the artistry lies in concealing the art.

Even this is not new: Guilfoyle designed the Royal Botanic Gardens at South Yarra on just such principles, although on the grand scale, and not in the naturalistic mode. The English poet Robert Herrick once wrote of a young woman that 'there is a sweet disorder in her dress', and this might apply to such a garden, which can accept, be enhanced by, fallen twigs and leaves, although once again with hidden management in the background to ensure that treasured plants are not smothered. 'Leaf litter is not litter' might be a new slogan in such a context.

This book covers much ground, not all of it well trodden, so it is in part exploratory. There is room for debate over some of its assertions. The author is a campaigner for a cause in which she believes passionately. It is a cause with which I sympathise and believe to matter. It is a strength of this book that it challenges the reader to look again, to think again. We are all on a steep learning curve about a country of which we still know so little, and of which we have destroyed so much. So a book such as this is welcome. Now let the trumpets sound, the curtain go up, the show begin. The Prologue is at an end.

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Reference