

# Restored Nature, Familiar Culture: Contesting Visions for Preferred Environments in Australian Cities

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## ABSTRACT

How are preferences for “native” and “introduced” species of plants and animals given expression in Australian cities? Given the nation’s predominantly European cultural heritage, how do urban Australians articulate multiple desires for living environments encountered in everyday life? In examining the cases of inner city parks, backyards, and more general views about flora and fauna appropriate for the city, the paper considers a range of deeply enculturated attachments to familiar landscapes. While residents have considerable interest in the possibilities of urban ecological restoration, our interviews, ethnographic observation, and textual analysis also reveal cultural preferences for introduced species and emplaced attachments to historically modified landscapes. These preferences and attachments are linked to senses of identity developed during formative life experiences. In the relatively young post-settler society of Australia, such drivers of environmental desires can sit uneasily alongside science-driven propositions about what is good for biodiversity and ecological sustainability.

## KEYWORDS

backyards, cultures of nature, ethnography, gardens, nativeness, parks

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To consider restoration is to reflect on how something might be otherwise, inviting the conceptual and practical question of “restoring to what?” What does it mean to restore urban ecologies, and what assumptions are contained in the common distinction between “urban” and “natural” places? As is clear from the range of papers in this special issue, concerns with urban ecological restoration are being played out across the world. Scholarship in both the sciences and humanities over the last few decades has unsettled the boundaries between humans and nature, as well as associated dichotomies such as tame and wild. This trend has also challenged the notion that cities are places of pure culture, outside nature (Braun 2005). The increased interest in nature in the city is partly the result of the pragmatic realization that the world is becoming more urbanized, and that for the first time in



human history, the majority of the world's population lives in cities (Botkin and Beveridge 1997; Millennium Ecosystem Assessment 2005).

In this paper, we explore these questions in the Australian context. We are interested in how people think and behave with regard to the plants and animals they envisage as part of "nature," in a society which is debating the place of "native" versus "exotic" species (Archer and Beale 2004; Franklin 2006). To restore the city to a state of nature is commonly understood here as to take it back across the temporal boundary of 1788, before European colonization. This perspective contains two central rifts: between an immigrant nation and its pre-colonization natural and cultural environment, and between nature and the city. For more than two hundred years in Australia, the distinction between the city and the bush has roughly paralleled that between culture and nature. The urban majority commonly locates a quintessentially natural "wilderness" far distant from the city settings of their own lives (Haynes 2003; NSW National Parks & Wildlife 2002).

Yet, in a context where "feral invasions" are shown in scientific literature as occurring over wide areas of the continent (Low 2001), there is an emergent set of environmental concerns, and these include considerable interest in "re-naturalizing" urban environments. In discussion and practice, both public and private, diverse ideas about nativeness, naturalness, and belonging among plants and animals are jostling for attention (Trigger et al. 2008). These debates, and conflicting values, about what is appropriate in nature, may occur both among different groups in society (e.g., conservation biologists versus non-experts) and also at times *within* the consciousness of individuals and groups. Among scientists themselves, there are competing notions about the importance of native plants and animals (e.g., Gould 1997, cf. Archer and Beale 2004: 306–38). Vernacular environmental desires can sit uneasily with science-driven propositions about what is good for biodiversity and ecological sustainability. Our broad aim is to provide an overview of such debates and practices, via presentation of illustrative case material, with particular attention to contesting visions for urban nature.

We first provide a brief overview of positions within the ecologically-informed scientific community, a group with considerable influence in public culture, and illustrate how these views intersect with non-expert socio-cultural perspectives on complex questions of belonging and connections to place (Mulcock and Trigger 2008). We show how the particular ecological and social history of Australia inflects these debates that are of international interest and scope. We



then draw on empirical case studies from our ethnographic research to illustrate how cultural predispositions shape everyday attitudes and practices, thereby problematizing any assumptions that ecological concerns are necessarily the primary drivers of societal consciousness relating to preferred urban environments. Our examples come from both public and private spaces: inner city parks, backyards, and general attitudes toward species throughout the city. Most of these examples relate to plants, but we also discuss birds and other animals. In the urban context, it is often the setting of domestic spaces and streetscapes in which debates rage. Our perspective is that urban locations potentially reveal much about Australian visions for the construction of landscapes, and simultaneously also much about how cultural identities are conceived. Against a background of increasing interest in “nativeness” in both nature and culture (Head and Muir 2004; Mulcock and Trigger 2008), certain cultural preferences for introduced species and historically modified landscapes appear to remain strong, arguably linked to sentiments developed during formative life experiences.

### **What is Natural, What is Native, What is Invasive, What is to be Preferred?**

To speak of “Australian” plants or animals is sometimes useful, since the boundary of the nation is more or less coterminous with that of a relatively isolated, ecologically distinct continent with something of a shared evolutionary history. But it is also fraught with difficulties. As Seddon (2002: 8) has argued, plants know nothing of nationality. And the Australian land mass encompasses many highly diverse environments, with plants and animals endemic to one often failing to survive in another. Any sharp distinction between “native” and “exotic” plants or animals, even for those here before 1788, at the least requires careful qualification (Seddon 2002: 8–19).

In the past 200 years, some 27,000 “alien” plants have been introduced to Australia. Indeed, the domestic garden industry has been the major importer, and many plants regarded as invasively destructive in scientific terms remain for sale and in very considerable consumer demand (Groves et al. 2005: 7–9). In Australia, then, among some conservationists, there is increasing attention given to the importance of ridding the country of “alien” plants and animals, or at least those which are “weeds” and “pests.” However, most scientific approaches now stress managing the ecologically hybrid reality – with a focus on

invasives – rather than aspiring to restore the pristine (Hobbs and Suding 2009; Macintyre and Hobbs 1999; Seastadt et al. 2008).

Contemporary Australians have largely grown up with environmental hybridity and we would expect them to regard it as the norm. For example, nationwide survey data indicate the ubiquitous ownership of introduced pets, especially cats and dogs, with 59% of families in 1994 and 53% in 2006 owning one or the other or both (Heady 2006: 9). As social scientists, we focus on the emerging parallel issue of human cultural hybridity and “belonging,” as it may be linked to forms of nature and people that are embraced or rejected across the citizenry. A range of questions provide a conceptual hook for our studies.

Are there significant culturally formed notions of personal and collective identity – related to nationalism and regions within nation states – that are implicated in public opinion about which plants and animals belong? Is there a risk of “wildlife xenophobia” (Seddon 2005: 7–9), linked to an overly parochial view about what “belongs” in nature, and contradicting the moral importance of openness to the ecological (and cultural) influences of the broader world? While ecological logic for species choice is clearly important, is there also at times a form of “ideology in the garden masquerading as science” (Pollan 1994: 55)? If, for example, there are similarities of environment in much of Australia and South Africa, such that some plants do well on both sides of the Indian Ocean, are there socio-cultural as well as ecological reasons why the same species is celebrated in one country yet despised (at least by activist conservationists) in the other setting? Here we can consider the cases of *Hakea* sp. (Carroll 2004), as well as acacia or “wattle,” the latter regarded as something of an “Australian icon” but considered an “alien invader” in South Africa (Blair 2005; Sweet 1999).

Furthermore, does the debate about ecological belonging carry symbolic significance that overlaps with assumptions about where certain categories of people sit on a moral hierarchy of cultural belonging? Such categories may distinguish between those who assert descent from earlier generations of Aboriginal people or historical colonists (or both), more recent migrants, refugees, and so on. English philosopher Isis Brook (2003: 227) cautions that “debate around invasive species needs careful handling for both ecological and social reasons.” Like other writers (Comaroff and Comaroff 2000; Groening and Wolschke-Bulmahn 1992; Helmreich 2005) she notes that “the rhetoric of invasion and degradation [can] apply both ecologically and culturally,” and that “nativism in ecology” can be uncomfortably linked to racism



(Brook 2003: 229). Nevertheless, in Europe as well as in settler societies like Australia and South Africa, there is concern, especially among conservation scientists, about an increasing domination of flora by “the same few ‘weedy’ species” and the associated “extinction of ‘ousted species;” hence, “environmental thinking” is that people should either “not move to environments new to them” or at least “curb the desire” to make such new places “feel like home” (Brook 2003: 229).

Brook, as well as others (e.g., Armstrong 2004), has argued that a key driver of people’s preferences for plants (and animals) is, indeed, the desire to “feel at home,” often leading appropriately *in cultural terms* to the *introduction* of “plants or forms of gardening that are drawn from somewhere else” (Brook 2003: 227). When we examine “the affective dimension of flora in human well being,” we see that people can “connect to place through plants,” via emotional linkages often forged in childhood or through long association (p. 232). Brook acknowledges that conflicting views between ecological knowledge and emotional desire for certain species and types of gardens, *can co-exist within individuals* (see also Gayton 1996: 71–77; Measham 2006; Milton 2002: 62–64).

In addressing how these issues play out in case studies from Australia, it is apt to note that the literature discussed above can risk emphasizing an overly theorized perspective on gardens, domestic spaces, and urban ecologies. There are contingencies inherent in all the expressions of ecological preferences and relations with particular environments under discussion. If urban gardeners and visitors to public spaces draw on childhood landscapes in framing their views on appropriate species and designs, it is most likely that they do not do so in a one-dimensional or unchanging way. Instead, we would expect a range of cultural and everyday circumstantial influences to jostle somewhat chaotically in most gardens and parks. Our backyard examples come from the eastern coastal cities of Sydney and Wollongong. When asked about influences on their decisions, 31% of interviewees (N = 265) mentioned television programs, 26% nurseries, 20% close personal contacts, and 18% cuttings or seeds provided by friends, relatives, or neighbors, with some participants naming more than one influence (Head and Muir 2007: 47). The nursery industry itself estimates that 26% of its sales come from impulse purchases (Head and Muir 2007: 67), though it is also worth acknowledging that unravelling the forms of enculturation that produce such impulses may well ultimately take us back to an examination of early and continuing life experiences of certain environments.

Before considering the data on east coast Australian backyards, we turn to case materials from the city of Perth in Western Australia, where inquiries were carried out regarding attitudes to an inner city public park and its urban surrounds.

## A West Coast Public Park

The data here are a small sample drawn from research during 2005–7, including 57 lengthy ethnographic interviews, short survey questions administered to 200 persons, and participant observation in a range of urban settings. Interviews for the larger project were conducted in private homes, public parks, government and other organizations, and public forums discussing environmental issues. Relevant documents and reports were examined as part of the study.

Hyde Park is situated in an inner city area of Perth and was one of the locations focused on in the research. The park was established in 1897, some 70 years after the first British arrivals. Initially a wetland or swamp area, it was gradually constructed as “a traditionally styled garden with two large formal ponds” (Syrinx Environmental 2004: 27). Findings here show that a perspective emphasizing ecological sustainability as incompatible with exotic species can clearly conflict in the urban environment with highly valued and familiar senses of place. We find a tension between “re-naturalizing” what might be termed a “European-style” park and maintaining introduced flora and design as part of a valued non-native heritage. Acknowledging this intellectual contest, the environmental design firm engaged for work on Hyde Park by local government, whose consultancy reportage is available to us, reflects on the challenge “to develop a solution acceptable to a broad range of stakeholders with widely contrasting value sets” (Syrinx Environmental n.d.: 9). The firm’s Restoration Master Plan, produced in late 2008, aims to “integrate and enhance the European and Indigenous cultural values and features of the park” (Syrinx Environmental n.d.: 9; Syrinx Environmental 2008).

The latter distinction is significant in this inner city setting, where previous debates have addressed issues including the removal of introduced plant species and their replacement with “local evergreen natives,” for example, sedges and reeds around pond perimeters. Also discussed is removal of walls surrounding the ponds and reforming the banks to “create naturally sloping lake edges” to “mimic a more natural water body” (Syrinx Environmental 2004: 27–28). However,



the environmental consultants recognize that public opinion regards the large number of deciduous plane trees (*Platanus* sp.) as playing “an important role in the overall aesthetics of the park” and providing “valuable shade ... in the summer months.” This is despite the consultant’s report preferring an “ideal solution” of removing “all of the Plane trees” (Syrinx Environmental 2004: 28). The consultants advising the local government authority state that the trees contribute substantially to water quality problems through leaf drop, and “produce allergic reactions in many people including headaches, migraines, eye irritation, pollinosis [sic.] and hay fever” (p. 28). We should note, however, that apart from apparent general public affection for the trees, the latter suggestion remains scientifically contested, with the official web site of the City of Sydney, Australia, reporting expert medical advice that there is no particular allergy problem with the trees, and indeed, that plane trees are tolerant of urban pollution and in fact are capable of taking “many airborne particulate pollutants out of City air” (City of Sydney 2009). The further point of relevance, not mentioned in the consultant’s report, is that native flora such as acacia (wattle) and melaleuca (paperbark/ti-tree) are also commonly found to produce allergic reactions (ASCIA 2010; Hon Foundation 2002).

Such contesting visions for this urban park landscape are further evident from several of our research interviews carried out during 2006-7. “The park’s heritage is not native and it will be protected,” said the mayor of the Council. On the other hand, the conservationist perspective seeks to “restore things that have been either totally destroyed or half wrecked by progress,” as explained by a different Councillor. This commitment to “re-naturalizing” the urban habitat is reported elsewhere as connected with a high valuation, if vaguely envisaged, of the historical presence of “Indigenous” (i.e. Aboriginal) people (Syrinx Environmental 2008: 42). However, those of our interviewees, such as the local Mayor, opposed to any unqualified “re-naturalizing,” speak with pride of the “European style” of such environments and of how more plantings of introduced trees are needed “to maintain the park’s character.” As well, there is contest over whether lay people actually know the difference between native and introduced species; a community survey found most locals wanted species like the plane trees, but a Councillor suggested that perhaps residents “had not understood what an exotic tree was” (Fletcher 2004).

The park ranger was an expert on this subject, and his specialist perspective was highly instructive though not necessarily shared

across the diverse urban community. What we might term close ecological surveillance of this inner city environment is evident from the ranger's detailed mapping of every tree across the park; 62 species are listed, with plane trees and jacarandas (also an introduced species) particularly predominant across the 15 hectare area. The ranger explained this mapping was done "because people are so interested in the park and a lot ... do like to know what trees are what. We try to sort of satisfy that need by doing it to a fairly high standard." The ranger commented on the small proportion of locally native flora now growing in the park, three species only (a few individual flooded gums [*Eucalyptus rudis*], jarrah [*Eucalyptus marginata*], and paper bark [*Melaleuca preissiana*] trees). With extensive lawns and manicured recreational areas, these few natives were, he said, the only "remnants" from the "original" ecological system of the Swan River coastal plain.

The ranger also identified, and gave qualified approval to, some 14 other "Australian" tree species brought in from distant habitats. However, in relation to the many exotic non-Australian trees (45 species, or 75% of those in the park): "at the end of the day, for the long term, it's not sustainable. You know, the water use for this park is just incredible. That lake has to be filled manually through summer." As well, certain hybrids were not his first preference for plants in the park. *Callistemon* spp., for example, also known in Australia as "bottlebrush," were "pests ... because they are a hybrid variety." In the case of a similar nearby urban park, where a form of restoration of a "native" landscape was being tried, *Callistemon* trees were a pest "in that they will overtake everything else and choke out the wetland." To quote: "it's a pest if it's not in a situation that you want it to be in." If you leave management of such species "to nature," said the ranger, "what you'll find is that the weeds will take over, undesirable species will take over." While "some species" of *Callistemon* are (or were) actually "endemic" natives on the Swan coastal plain, the brilliantly colored bottlebrush plants now in the urban parks have been, in his view, "hybridized to sell to the public." As he put it, "Well, it really depends on, if you are a purist, you'd want just totally species which occurred in the area." The ranger went on to comment that the flower size, bred for attractiveness, is indicative of human manipulation. While such hybrids can be good, "if you want to plant a tree in your garden that is low water use, has nice flowers and attracts the birds," they are not suitable "if it's going to be the predominant species" that displaces a more varied suite of flora.



Asked whether there may be risks connected to an overly purist view of what should grow in city parks, the ranger acknowledged this possibility; but added: "I personally see ourselves [i.e. Australians] sort of under threat and I just try to do a little bit to alleviate that." He is committed to ecological restoration, but feels this is a minority view, as many urban land owners desire lawns and garden beds that increase the economic value of their properties. The implication being that many urban dwellers transfer such preferences to parks in the city as well. In contrast, his own reaction to the long-established plane trees around the lakes is to stress how they do not support "Australian identity." "They are a remnant of a way of thinking ... that [historically] made people feel at home in a foreign country."

Indeed, the ranger would prefer to replace the plane trees with "huge river gums," which would give what he describes as "a sense of Australia." Those who planted the trees were "people who were Australians who thought of themselves as British, and England was home," though there was also "a strong Italian influence too, which came later." Those responsible for establishing the European character of the urban park "came here and they planted these trees, they really were at odds with the Australian wilderness and it scared them, and they needed something like this to center themselves." In this perspective, then, the broader society is "still ... battling against Australian flora and fauna." This is especially evident "on a hot summer's day when you've got a nice big European looking tree, with nice lime green leaves and dark green leaves that look cool." In the view of this committed ecological restorationist, this issue remains a source of tension in Australian society.

## **The Ambiguity of "Nativeness" and More from the West Coast**

The urban park ranger's ambivalence about, if not disapproval of, hybrid plants bred for attractiveness in the marketplace, suggests one end of an apparent continuum of views about "natural native" species that ought be desired for Australian cities. In further illustration, we draw from our research the engaging case of rainbow lorikeets (*Trichoglossus haematodus*) in the city of Perth. Unlike the locally "native" ring-necked parrots (*Barnardius zonarius*), this bird was introduced during the early 1960s, and is native to eastern Australia where it is valued highly. In Perth, on the west coast, a population of more than 10,000

birds is now said to enjoy communal roosting sites, especially amidst “exotic” eucalypts, introduced palms, and extensive fruit orchards, but also in native vegetation. The official view is that the bird competes with several locally indigenous species and that it is a “pest” with regard to agriculture (Jerrard 2006; Lamont 2002). Rainbow lorikeets can be shot or live-trapped legally outside the city, though (probably for safety reasons) this does not apply within the metropolitan area.

Gardening enthusiasts such as the following writer embrace this view: “rainbow lorikeets ... are stealing the habitats of local species” and their presence is encouraged by planting “eastern states” flora (Passmore 2003). And among a selection of written comments from Perth people responding via self-selection to a nationwide online survey seeking attitudes to urban wildlife (ABC Radio 2004), we find rainbow lorikeets described as: “feral birds that will bully and drive away” native birds; “horrid, ugly, noisy pests [that] destroy everything as they invade and take over,” and birds with “loud raucous calls [that] are not typical of our Western Australian birds and can be *unnaturally* loud” [our emphasis]. “Though beautiful, they do not belong here,” said one contributor.

In this case, then, being a species “native” to Australia does not persuade some Perth residents to think of rainbow lorikeets as appropriately indigenous. However, clearly a mix of attitudes exists, with close attachments to the bird arising from familiarity and its aesthetic beauty. A large, hand-written sign visible on a public road in 2006 promised a reward of \$100 for the return of a lost pet lorikeet. And a young couple interviewed, who had a lorikeet (purchased from a shop) which had been hand-raised from nine weeks of age, described the experience as “just like having a baby.” The bird was like a “kind of a child” and “definitely part of the family.” They believed the bird called them “mummy” and “daddy” and they loved it dearly. When asked what they thought about the ecologically oriented argument that wild rainbow lorikeets did not belong in Perth, the response was much more generous than the concern with a feral “pest.” While acknowledging its apparent introduction from eastern Australia, the couple felt the bird should now be accepted as a delightful part of the city’s fauna.

Such a blurring of any consistent values attributed to “native” and “exotic” species is common across our data. For example, those expressing positive sentiments about native animals can also report how these animals have adapted to non-native plants grown in domestic gardens – thus, native possums and kangaroos eat exotic roses, native parrots like introduced pomegranates and other fruit trees, native



insectivorous birds are attracted to the open ground of vegetable patches, native ibis and wagtail birds find introduced grass lawns conducive to their needs, and native frogs like lemon scented gums that do not “belong” to southwest Australia in ecological terms.

Furthermore, this mix of views about native and non-native nature prompts some richly evocative responses when people are asked about their senses of identity in relation to feelings for particular landscapes. Examples include a female interviewee living in Perth but from a farming background who, when commenting on how she left and travelled for nine years in Europe, reports how she “fell in love with beautiful gardens, the color, and how they were created;” she feels “very linked to my ancestry and my ancestry is English and when I go to England and I look at the types of gardens there and the greenery, I feel a very deep pull to that, a very primal pull.” Here we find deeply enculturated sentiments connected to a perceived ancestral cultural identity, and youthful familiarity with English landscape images, regardless of the person’s life experience of environments in Australia. When the interviewer probed respondents on whether a choice to plant native or exotic flora in Perth could be connected to a sense of national belonging or “feeling Australian,” various responses mirrored the mixed preferences for different urban landscapes. Some identified with Aboriginal landed identities: “I have a connection with the land like the original inhabitants did, so I want to recreate that around my house,” commented a male speaker aged in his 50s. Others were keenly aware of their struggle to feel “at home:”

As a Caucasian ... I feel I am an introduced species myself, and I especially like bush land because it gives me a ... sense of something that was there before I came, before my ancestors came ... perhaps it is a kind of guilt because my ancestors came uninvited but I think I’m trying to reconnect, trying to say look, I don’t want to do you harm, I want to justify my presence here by trying to re-establish something which people like me have spoiled, like a restitution (female speaker aged 35 years).

Such views do, however, appear consistent with an overall commitment to ecological hybridity, a form of consciousness appropriately characterized as postcolonial and arising from recognition of the entrenched cultural hybridity that constitutes the modern Australian nation. Thus, informants comment: “there’s this long thing going backwards to where we came from and I’m really aware ... that I like an environment ... where I see a mixture ... of pasture and bush ... I do think we’re transplants here, but we also belong now, so it’s interesting.” “I love the native plants, ... but if I were restricted to the native

plants I would feel somewhat impoverished.” “A lot of things that people call weeds I love, like morning glory” (*Ipomoea indica*). “I do think now that both indigenous plants and exotic plants belong within the urban environment here and I think that it’s much more beautiful because it’s got a mixture.” In the west coast city of Perth, then, we find a mix of nativeness and introduced forms evident in our case materials. And in all of this the links between sentiments about what belongs in nature and what belongs in society are evident.

## Insights from East Coast Backyards

Here we draw on work from an extensive sample of 241 Australian backyards and the environmental relations of the people who shape them (Head and Muir 2006a; 2007). The east coast sample comprises 122 backyards in Sydney and 119 in the coastal city of Wollongong, 80 km to the south. The sample aimed to encompass the socio-economic, demographic, and ecological variability within each of these metropolitan areas. Methodology involved semi-structured interviews, as well as mapping of backyards and their contents, including vegetation. Consistent with the Perth findings of a complex mix of contested visions for urban nature, this study shows that the most popular types of gardens in the east coast cities of Sydney and Wollongong include exotic plant species, alone or in combination with natives. On the basis of preference and practice, some 51% of the sample was designated “non-native gardeners,” 23% “general native gardeners” who chose a combination of natives and exotics, 13% “committed native gardeners,” and 13% “non-gardeners.” However, these broad categories are complicated by overlapping characteristics, and here we endeavour to present illustrative examples of four general perspectives among research subjects. The examples enable us to particularly address the issues of native/exotic and inside/outside the city, as well as a partially shared apparent desire to achieve or maintain a tidier living environment than “nature” alone might otherwise create (see also Head and Muir 2006b).

### **Example 1: Bringing Native Nature into the City**

A perspective held among a modest proportion (no more than 13%) of our subjects entails strong attitudes and practices in favor of native plants and against exotics. Most such informants would see them-



selves as restorationists, and as repairing a damaged urban environment by replanting “original” plants, defined as those that existed in the area prior to European settlement. Some of these gardeners connect their narratives of redemption to the divide between the bush and urban settings. To illustrate, one woman contrasted the purity of nature with its opposite in the city, seemingly suggesting the impurities of culture: “I love the Australian bush. I’ve been a bush walker all my life. I like walking in it and although I have grave doubts about Australian society, the bush itself to me is pure.”

Those whose private backyards are located next to areas of bushland that can exist amidst some suburban blocks are more likely to have unfenced or physically or visually permeable boundaries, and to discuss their planting strategies in terms of “bringing nature in” to the domestic environment. People in this group often talk about “connection” to the bush as the reason they bought their properties. For example, one interviewee advocates “a merging of the Australian natural environment and our living environment rather than being this discrete thing.”

### ***Example 2: Bringing Exotic Nature into the City***

This perspective involves people who are passionate gardeners, for whom the categories “nature” and “native” are not necessarily the same thing. They are very keen to see more “nature” in the city and in their everyday lives; however, their vision of flora that ought to be cultivated is far from restricted to plants that are regarded as either local natives or “Australian” species. This example draws on both the numerically strong “non-native” and “general native” gardener groupings. The predominant view entails a broad and perhaps more welcoming view of “nature” in the city, compared with the perspective thinking of nature as necessarily equivalent to “nativeness.” Among these informants, we find a view whereby nature in the form of a wide variety of flora can be both conceptualized and experienced as a sense of peace, a haven, and as encompassing a close relationship with non-human life.

The need to garden, whether for production of food or in the creation of aesthetically satisfying backyard environments, was seen by a number of people as nothing less than forging a relationship with the earth itself. The materiality of soil can be connected with the experienced physicality of working, such that the integration of labor and restoration of the soul are at times felt to be fundamental to life

itself. In the words of one elderly woman: “I belong to the universe when I am out in the garden.” The connections that emerge are often very physical, particularly between person and soil, or as many would have it, “the earth:”

It’s in my blood... It’s never been work, never. I’ve always considered that the earth heals. If you handle soil, handle the earth, it heals. You don’t get things the matter with you, you can come out into the yard feeling depressed, down in the dumps, the whole world is on your shoulders. You work with the soil for half an hour and your whole attitude changes.

And, similarly, as another female speaker put it:

I think there’s something about the earth [more] than just the feel of it and – I mean I’ve got [longer finger] nails at the moment because I’m not digging around in the dirt – but I don’t know, I just get a really good sense about our country and just our environment and how we need to look after it from being involved in my own backyard.

### ***Example 3: Keeping Native Nature outside the City***

Among other research subjects who conceptualize nature as essentially native, there is the suggestion that its appropriate location is not in the backyard but outside the urban setting. This view enhances a conceptual distance between urban environments and what is regarded as the appropriate locus of the “natural.” Both of the following speakers distinguish between the nature that is desirable in their backyards and that out in the bush:

Bush to me should be bush and ... you know, if you want to plant a[n exotic] hibiscus, put it in your backyard. (female aged in her forties)

I love going out in the bush, and going and looking at wildflowers and things like that. But I just felt what I wanted out here [in my backyard] was a nice, very flower garden, more like your cottage type garden and the natives just didn’t do that for me. (female aged in her fifties)

Trees, particularly large eucalypts (gums), provide a further example, where their height and circumference of branches is said to exclude their belonging: “I don’t think gum trees have a place in suburban backyards somehow.” Size, danger due to falling branches, and the “messiness” caused by the year-round shedding of bark and leaves combine to create an ambiguous, liminal space for such trees, producing anxiety in this perspective on what is appropriate:

I sort of appreciate our national parks and the need for [native] trees and things like that. But if you look round we don’t have any trees in our back-



yard. My husband won't have a tree. I would have one, but he feels threatened by trees falling on us... When I was a child I got a lot of good feelings out of national parks and picnic areas and that. But to be honest, I get a better feeling in my own backyard now ...

As with those informants in the Perth study who were of a similar view about species appropriate in city parks, such comments suggest a level of attachment to, and, indeed derivation of comfort from, an urban Australian ecology that has changed radically since 1788. The perspective we depict here also illustrates a certain assumption about an ideal dualism that should exist between the city as domesticated (perhaps "cultural") space and nature that exists "somewhere else." We might say that this is an understanding of ecological belonging that is based on species being in their correct place.

#### ***Example 4: Tidying Up "Nature," Both Native and Exotic***

In a perspective widespread among research subjects in the east coast study, neatness and tidiness are associated with order, beauty, and happiness, though this view can be held for diverse reasons. It connects to and overlaps with example three. So, the need for order and tidiness is expressed in relation to trees, but also in regard to the need for lawn and in frustration at any sense of a general "mess" in the urban garden setting. At times, it is more the front yard in private dwellings that is envisioned in this way, with the backyard allowed a greater degree of untidy plant growth.

However, we find many people wanting to put some distance between themselves and the perceived messiness of nature. Thus: "I don't mind wildness as long as it's not too messy." This kind of disposition intersects and overlaps with the other perspectives, in that there are various ways by which orderliness can be achieved, and indeed a variety of perceptions about what constitutes tidiness. For example, a passionate cultivator (and mower) of exotic grass species lawn areas and a committed native gardener who removes exotics may both be understood as "tidying up," in the sense of creating and maintaining order in their intimate living city environment. Both may well accept or celebrate nature "doing its own thing" provided it does not have to occur right on the doorstep of their domestic urban space.

Tidiness appears to be valued for a complex set of reasons that include social respectability, a certain moral quality, and the stress occasioned by mess, the latter expressed with some weariness by the

working mother who said of her backyard, as if of another child, “I resented the mess and the constant need.”

## **Contesting Visions for Restoring “Nativeness” and Maintaining What is Culturally Familiar**

In the context of two studies from west and east coast Australian cities, we have described a mix of overlapping and contesting views about what “belongs” in urban nature. We have sought to describe the character of contesting sentiments (articulated consciously and/or expressed in behavior) in regard to native versus introduced flora and fauna. We have presented a study of urban park environments and associated views about species that “belong” in the west coast city of Perth. Along with this we have discussed case material from research on private backyards and articulated reasons for their preferred form in the eastern cities of Sydney and Wollongong. Common to the data is a continuum of desires ranging across assumptions about various plant and animal species, with a mix of contested and overlapping views about what is “natural,” what is “native,” what is “invasive,” and what is “preferred.”

The growing environmental consciousness about the ecological and ethical significance of restoring “native” landscapes, part of a social movement that is evident throughout the papers in this collection, sits in Australia alongside a desire for culturally familiar non-native nature in urban settings. While the ecological significance of local biodiversity tends to be taken for granted in scientific perspectives on sustainability (Goddard et al. 2010), the implications of our qualitative social research are that attempts to change behavior and/or thinking among city residents will require engagement with an ambivalent mix of cultural assumptions and beliefs—enculturated dispositions that are seemingly informed by general notions of what “belongs” in the city and the bush in a settler-descendant society.

Views expressed among our informants in both studies underscore the significance of emotion and a desire to link landscapes to a sense of place—in many cases, to a sense of “home”—as discussed in the literature introducing this paper (Armstrong 2004; Brook 2003; Measham 2006). The research thus points to links between what citizens believe belongs in nature and what they understand to be the constituents of their cultural identities.



Some informants commented on their cultural sense of either connection with or displacement from native and/or modified Australian environments, but few were prompted by the projects' questions to associate themselves as humans with any blunt notion of an "alien" presence. This is despite the fact that public association of Australian Aboriginal culture with a distinctively native nature implicitly problematizes how non-Aboriginal people might understand their own sense of a "native" or "indigenous" identity. Notwithstanding the diversity of assumptions and preferences we have described, most people implicitly (and sometimes explicitly) exempt themselves as particular types of humans from the contested question of legitimate belonging. This classification can sit in tension with their view about the status of plants and animals. For example, committed native gardeners, none of whom were Aboriginal Australians, were not as hostile to their own presence as they were to "exotic" or "feral" plants. We are led here toward further research questions about the degree to which a sense of "nativeness" or "indigeneity" is emergent across the broad population of settler-descendant societies such as Australia (Read 2000; Trigger 2008), and if so, how might this emergent connection to place link to changing preferences for species and landscapes in the urban settings where most citizens live.

An understanding of diverse and emerging senses of Australian cultural identity is thus relevant to how future urban landscapes will be envisioned. We believe the policy implications of this research to be that knowledge of science-derived ecological issues is unlikely to be the sole driver of people's preferences for plants, animals, and the general character of city environments. Of critical relevance will also be people's assumptions about what is appropriate in terms of their formative life experiences, their consequent familiarity with particular natural and cultural features, and their senses of what forms of nature are commensurate with notions of Australian national and regional identities.

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