

# LANDSCAPE REVIEW



## THEME

Mappings

## CONTRIBUTORS

*Hannah Lewi, Andrew Saniga, Wally Smith*, Immersive and Temporal Experiences in Historic Landscapes: Designing a Mobile Digital Guide for the Royal Botanic Gardens Melbourne

*Brent Greene and Heike Rahmann*, Glittersophy: The Good, the Bad and the Ugly

*Fiona Johnson and Jillian Walliss*, Reconciling History: Inserting an Indigenous Space into the University of Melbourne Campus

*Alison Loveridge, Rebecca Duell, Julie Abbari and Michelle Moffat*, Night Landscapes: A Challenge to World Heritage Protocols

*Ian Henderson*, Lan Yuan: A Garden of Distant Longing: Book Review

*Shannon Davis*, Go With Me: 50 Steps to Landscape Thinking: Book Review

*Jacky Bowring*, Making Landscape Architecture in Australia: Book Review

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# Mappings

JACKY BOWRING

Maps are potent analytic and generative tools. While often assumed to be objective, maps are inherently subjective. The choice of what and how to map is core to a map's meaning. The mapping process, therefore, embodies power and knowledge and can be harnessed in the imagining of new understandings and new visions. The thread of mapping can be traced through the four papers in this issue of *Landscape Review*. Each paper engages explicitly or implicitly in mapping and enlists maps across a spectrum, from description to subversion.

First, Hannah Lewi, Andrew Saniga and Wally Smith present a contemporary version of a map: an iPad app. In their paper, 'Immersive and Temporal Experiences in Historic Landscapes: Designing a Mobile Digital Guide for the Royal Botanic Gardens Melbourne', the authors discuss how Master of Landscape Architecture students at the University of Melbourne used this modern mapping approach to interpret the historical landscape of the Botanic Gardens. The approach draws on a centuries-old legacy of guiding visitors through designed landscapes using some kind of interpretive tool. In the past, it would have been a guide book or literally a map. But devices were also available that helped amplify and shape a viewer's perception of the place they were exploring.

In imagining the iPad app developed by Lewi, Saniga and Smith, another device comes to mind. In an uncanny echo of the iPad, many eighteenth-century tourists would have travelled holding a flat device about the size of a large envelope with a shiny black surface. For the eighteenth-century tourist, however, this was about being connected not to the internet and the virtual world of an app but to the highly polished convex black-glass surface that distorted the view so it appeared more like a painting by Claude Lorrain. Lorrain was a painter whose work provided a template for the composition of 'picturesque landscapes' and, in recognition of this, the curved glass mirror was known as the Claude glass. In both cases – the iPad and the Claude glass – the hand-held device is interactive, providing both a shared experience in terms of common conventions and one that the individual controls through their own itinerary. This dual use highlights how the process of interpretation negotiates both the collective and the individual relationship with the landscape.

While the iPad app provides objective information about the historic aspects of sites within the Botanic Gardens, the process of walking, looking and listening also becomes immersive. This was an important aspect for Lewi, Saniga and Smith who were interested in how students could become fully engaged in the site through undertaking their own journeys. The authors were striving for both the instructive possibilities of the iPad app and the richness of experience that comes through immersion, through having all of the senses stimulated while travelling around a site.

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## KEY WORDS

*Mapping*

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*Heritage interpretation*

*Counter-mapping*

*History and design*

## EDITORIAL

Brent Greene and Heike Rahmann explicitly use mapping in their paper, 'Glitterosophy: The Good, the Bad and the Ugly'. In reflecting contemporary trends towards mapping as a generative design tool, Greene and Rahmann draw in particular on the composite mapping approach – of mapping several variables at once. They explain that composite maps allow for multiple time periods to be shown and, through this, to reveal latent patterns. This revelation leads towards the generation of the physical form that draws on these historical layers, and engages with the processes that have shaped the landscape. For Greene and Rahmann it is the place of weeds that is of particular interest, and they explain how species classified as weeds have important attributes that can help with the rehabilitation of toxic soils. Their design process outlines the possibilities for enlisting and enabling these species to infiltrate sites and create positive benefits.

This elevation of the other, of that often excluded, presents a further form of mapping as it echoes with the concept of counter-mapping – an approach that maps against the grain of dominant power differentials. Counter-mapping – the term was coined by Peluso in her work in the forests of Indonesia (Peluso, 1995) – is a type of critical cartography, where the process of mapping is in itself a form of critique. This perspective presents a potentially useful tool for landscape architects working against the grain, in the way that Greene and Rahmann are with their 'Glitterosophy' project. Many of the counter-maps produced reflect a 'grass-roots' philosophy, where those who otherwise lack a position of power are able to make a point through mapping.

The idea of counter-mapping, or subversion of traditional mapping conventions, also underpins the paper by Fiona Johnson and Jillian Walliss, 'Reconciling History: Inserting an Indigenous Space into the University of Melbourne Campus'. Again working with Master of Landscape Architecture students at the university, Johnson and Walliss explore how mapping can reveal aspects of suppressed history, in this case of the landscape of the University of Melbourne. Through the process of mapping aspects of the campus that had been overlooked or edited out of the understanding of the campus history, students generated ideas for a space that could do more than simply represent aspects of history. The challenge was to create a space that could support reconciliation. Through the design process, however, it became clear it could not be achieved by landscape architecture alone. As well as reflecting on the complexity of creating such a place, the paper reports on a very tangible outcome. The mappings produced as part of the studio project became the basis for a new guided walking tour of the campus, one that reveals previously invisible landscape elements.

As a form of description, maps can provide the necessary coordinates for understanding the spatial nature of a phenomenon and, subsequently, supporting its protection through legislation. The fourth paper, by Alison Loveridge, Rebecca Duell, Julie Abbari and Michelle Moffat, examines the Aoraki Mackenzie Dark Sky Reserve in the South Island's Mackenzie Basin, and the possible consequences of its becoming a World Heritage Site. The extent of the starlight reserve means a range of other land uses is included within the site, and, as in the case of other sites recommended for World Heritage status, some have reservations about how this status may limit other activities. The authors, however, highlight a move towards guidelines that embrace multifunctional landscapes, rather than require a pure focus on the one element that is worthy of World Heritage recognition.

In this context, mapping provides vital spatial information about the coalescing uses in the area and the ways in which growth and development can be carefully controlled to avoid destroying the night-sky darkness through light pollution.

The three book reviews in Issue 15(1) could also be seen as maps of sorts. Two of the books reviewed have specific geographic locations, and the other is more of a guide for a designer's journey. Ian Henderson reviews James Beattie and Duncan Campbell's *Lan Yuan: A Garden of Distant Longing*, which explores the Chinese garden in Dunedin within a broader cultural context of the Chinese in New Zealand. Henderson draws attention to how this book is part of a wider discourse of particularity within landscape architecture, with this point of departure providing a reflection on the place of imported gardens in New Zealand.

In the second review, Shannon Davis critiques *Go With Me: 50 Steps to Landscape Thinking* by Thomas Oles with Marieke Timmermans and Jacques Abelman. Davis frames her review around the idea of a book of tools and how it can be used as a way of seeing things anew. As Oles himself advises, it is a book to be taken everywhere from half-frozen lakes to canals and deserts; it is perhaps another kind of mapping device, one that is about both orientation and invention.

And, finally, I review Andrew Saniga's *Making Landscape Architecture in Australia*. Saniga has produced what is destined to become an important work on the history of the landscape architecture profession in Australia and beyond. The sense of geographic particularity is also significant in this book, which traces relationships between people and their environment within the specific frame of an emerging profession.

While the theme of mapping interweaves throughout the issue, at the same time it embraces another form of representation, the snapshot. This is a word borrowed from Thomas Oles's book, as quoted in the review by Shannon Davis, where Oles is seeking to capture the very nature of 'landscape' itself. The idea of landscape as a snapshot of cultural and natural processes resonates in the papers and books reviewed, each of which provides a perspective, a way of seeing and an outlook. We are offered snapshots of many landscapes, with views into the Royal Botanic Gardens Melbourne, into a river edge in Melbourne and a creek margin in Canberra, the University of Melbourne campus, the Mackenzie Basin's dark-sky reserve in the South Island, a Chinese garden in Dunedin and the entire continent of Australia.

While embracing the southern hemisphere focus promoted by *Landscape Review*, these views also reverberate much further afield. The richness of observation and experimentation in this issue demonstrates the potential of landscape architecture as a profession and a discipline to continue to enhance our understanding and experience of the landscape.

This issue of the journal has been some time in the making, and it represents another important contribution to the growing body of research that *Landscape Review* has established. The next few issues of the journal are already in formation, with several special themes being explored. We are always interested in receiving submissions for the journal, including proposals for themed issues.

## REFERENCE

Peluso, N L (1995) Whose Woods are These? Counter-Mapping Forest Territories in Kalimantan, Indonesia, *Antipode* 4(27), pp 383–406.

# Immersive and Temporal Experiences in Historic Landscapes: Designing a Mobile Digital Guide for the Royal Botanic Gardens Melbourne

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To orientate is to hop back and forth between landscape and time, geography and emotion, knowledge and behaviour (Hall, 2004, p 15).

This paper explores what mobile digital technology can bring to guiding our experience and appreciation of historic, designed landscapes. It focuses on the authors' attempt to design and implement a digital iPad tour to help landscape architecture students with fieldwork visits to the Royal Botanic Gardens Melbourne (RBGM). We situated this digital design project within a set of larger concerns surrounding landscape interpretation, exploration and history. The aim of this account is not so much to evaluate the success or otherwise of the mobile guide, or digital technologies generally,<sup>1</sup> but to consider how the project has reproduced or extended long-standing practices of landscape interpretation and guiding. The importance of conjuring a speculative approach to the perception of landscape, of delving more deeply into the vernacular and historic environments that surround us, is something that JB Jackson emphasised as 'learning how to see' and uncovering the 'nature' of landscape (1984, pp x, xi).

The pursuit of informed touring around designed gardens – sometimes supplemented by maps and images – has a long and continuous history. This includes formative precedents from the eighteenth century onwards in Europe and was further fuelled by the rise of mass tourism in the twentieth century, when visiting gardens became a popular pastime. However, the inculcation of *both* an informed understanding of a garden designer's intentions over time, *and* an appreciation of a garden's sensory experience in the present, has always been notoriously challenging. Edward Casey, for example, asks why the West was delayed (in comparison with the East) in developing visual languages for describing and representing gardens and landscapes as a primary subject rather than a secondary backdrop (2002, p 18). In answering, he points to the perceived difficulties of spatially and visually encapsulating any garden or landscape in terms of broad qualities such as scale, viewpoint and movement. Historic responses to this representational challenge gave rise to experimental panoramic, cartographic and topographical images as potential ways of communicating expansive and layered landscapes (Casey, 2002, pp 7–14).

Innovative techniques for describing and guiding around landscapes have advanced in recent years through the rise of ubiquitous digital mobile technology

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## REFLECTION



and ever-more reliable connectivity in outdoor settings. For example, in the United States, the Indianapolis Museum of Art has produced a mobile app for visiting the Virginia B Fairbanks Art and Nature Park: 100 Acres, which gives visitors access to videos, photographs and text for locations in the park.<sup>2</sup> In another case, the New York Botanic Gardens has created an app that guides visitors through the recreation of Monet's garden at Giverny. Here, the gardens can be seen through an 'Impressionist lens', and visitors use an iPhone camera to create and share images, while another immersive feature allows paintings and plants to be matched.<sup>3</sup> Also in New York, numerous apps are available for self-guided tours of Central Park. These use a more passive curatorial formula involving an image of a 'stop' representing some form of curiosity in the park, along with associated historic text or narration.

In a different way, the audio-visual modes revealed in the work of Janet Cardiff and George Bures Miller and their numerous scripted 'Walks' seek to combine audio, video and narration, reputedly with great potency and with an ensuing 'psychological immersion'.<sup>4</sup> From our research, however, it seems less common to find the presentation of, or interaction with, topographic, cartographic or archival (visual) information that might allow for a richer combination of cognitive processes leading to different forms of immersive landscape experience.

Rather than 'threatening' our first-hand experience of gardened places, new digital mobile media, if designed with sensitivity and intelligence, can enhance the exploration of landscaped sites and provide new modes of engagement rather than merely simulating or reproducing them. These exciting possibilities for creating new kinds of touring experiences in landscapes motivated the design of the iPad guide 'Landscapes in Time: A walking tour of the Royal Botanic Gardens Melbourne and the Domain' for use by Master of Landscape Architecture students at the University of Melbourne (Figure 1). In this paper we outline the



Figure 1: 'Landscapes in Time', iPad application for Master of Landscape Architecture students studying History of Landscape Architecture at the University of Melbourne (Lewi, Saniga, Smith et al, 2011).

particular challenges in making this guide and situate it within the tradition of touring and appreciating historically significant landscapes and gardens through in situ experience.

The students involved in the guide's development were undertaking their Masters of Landscape Architecture at the University of Melbourne, and the field visit was an important component of a course-work subject called 'History of Landscape Architecture'. The subject provided a critical examination of the historical development of landscape architectural design and theory including the events, social influences and personalities involved. The field visit also pursued these broad aims and was supported by the iPad guide, which was designed and updated between 2011 and 2013 along with an accompanying paper-based workbook to be completed and submitted for assessment.

In a pilot study in 2011, 16 students used the mobile guide over a designated two- to three-hour visit in which they were divided into four groups, each having a single iPad to share. They were followed by researchers who observed the usability of the guide. In 2012 and 2013, following improvements to content and navigation, a further 30 students completed the tour but conducted it in their own time. About 10 of these students carried it out alone and the rest worked in groups of two to four people, with the total time spent ranging from three to seven hours. In 2012, the students visited without staff present, but in 2013 two researchers observed them for a limited time. All visits were followed up with a questionnaire and focus-group discussion with students to examine their experience of the field visit and iPad guide. These observations inform the account given in this paper.

As educators, our motivation was to create a functional hand-held digital guide to support the fieldwork of students studying a historical landscape. First, we wanted to test how the delivery of digital content could extend the ways of physically guiding students through a site of complex historical significance – whether as a replacement for, or supplement to, a conventional teacher guide. Important to this guidance were the concepts described as 'directed looking' and 'choreographed walking'. Second, we posed the question of how the hand-held guide might provide resources that informed and augmented a person's on-site experience. This is a larger educational issue being pursued by inquiries into 'mobile-learning' more generally (Cochrane, 2010; Kinash et al, 2012; Vavoula et al, 2010). Documentary resources particular to the discipline of landscape history and heritage include historical and contemporary maps, archival and contemporary photographs, archival film footage and sound and text narration. A third question, which falls outside the scope of this paper, was how this mode of guided touring might encourage, or discourage, social interaction between students, which is widely understood to foster group learning (Pfeiffer, 2009; Sharples et al, 2005).<sup>5</sup> In terms of technological issues, we specifically wanted to explore the possibilities of the iPad format, in contrast to the smaller smart phone,<sup>6</sup> as the increased dimensions of a tablet screen supported better map and image presentation and comprehension, which was clearly important for landscape settings. Other technical possibilities, including the use of global positioning system (GPS) locational information, were incorporated in the design.

While these pragmatic, technological and educational concerns were central to the project, a complementary motivation was also involved. Being more germane

to the historical concerns in this paper, and applicable to all sites of historical design significance, it focused on exploring ways of capturing and experiencing the changing layers of design intentions and interventions that have shaped (and sometimes failed to shape) landscapes and gardens. Such design intentions and influences may or may not be extant in the physical fabric of the setting today. An attempt to understand and appreciate these partly visible, partly invisible design intentions involved two possibly contradictory activities. The first was promoting an immersive bodily and sensory experience of the site in a manner sympathetic to its design, and the second was adding to that experience with information and documentation not normally on-hand to the visitor. This twin agenda – of immersive experience and information – has been analysed by others through ‘reception theory’ formulated around landscape appreciation (Conan, 2003a, pp 28–31).

In setting the challenge to combine information delivery through the iPad platform with the promotion of physical and sensory immersion in the site, we were conscious of what Corner has referred to as ‘eidetic operations’ (1999). These ‘operations’ concern the mental imaging of landscape inclusive of not only the visual but also other senses such as the acoustic and tactile. Corner concluded that: ‘the future of landscape as a culturally significant practice is dependent on the capacity of its inventors to image the world in new ways and to body forth those images in richly phenomenal and efficacious terms’ (1999, p 167).

### Historical design intentions at the Royal Botanic Gardens Melbourne

Guided by the contextual focus of fieldwork in the Master of Landscape Architecture subject, our spatial and historical focus was the RBGM and neighbouring sites that form part of the King’s Domain: Alexandra Avenue, Queen Victoria Gardens, the Alexandra Gardens and the Yarra River. The information we chose to present through the mobile guide focused on the intentions and influence of the early gardens’ directors Ferdinand von Mueller (1825–1896) and William Guilfoyle (1840–1912). It was their contribution to design and management that proved so influential to the structure of the contemporary landscape. The inclusion of part of the King’s Domain was as much about being historically accurate in terms of narrating the gardens’ creation as it was about designing a walking route that negotiated different types of boundaries, including property, visual, physical and the cognitive or even experiential boundaries, we identified as being potentially significant for those experiencing the gardens (Downs & Stea, 1977).<sup>7</sup>

The gardens were founded in 1845, with the site selected by Superintendent (later Lieutenant-Governor) Charles Joseph La Trobe (1801–1875). Ferdinand von Mueller, who was appointed as Government Botanist in 1853, became director of the gardens in 1857 (Aitken & Looker, 2002). His directorship of 16 years marked a significant era in garden policy, which emphasised the scientific arrangement and display of plants for the purposes of expanding knowledge and for economic advancement over and above aesthetic qualities and recreational use (Watts, 1983, p 60). In his first years, von Mueller established a pinetum and the two-acre Systems Garden for the cultivation of plants with economic, medicinal and commercial potential. By 1864, the gardens were perceived to have been



proceeding in faltering starts, and von Mueller was dismissed in 1873, although he continued to work in the park's herbarium until his death in 1896. Regardless of the later radical transformation that would be brought upon the European sensibility von Mueller had established, it was his influence in clearing the land and curating a vast collection of plants that set down the crucial vegetative frame that subsequent directors would build on (Figure 2a).

William Guilfoyle was appointed as the next director in 1873. He set about transforming the gardens into a landscape underpinned by a new design approach; one that appreciated aesthetic (and recreational) values as much as it did the

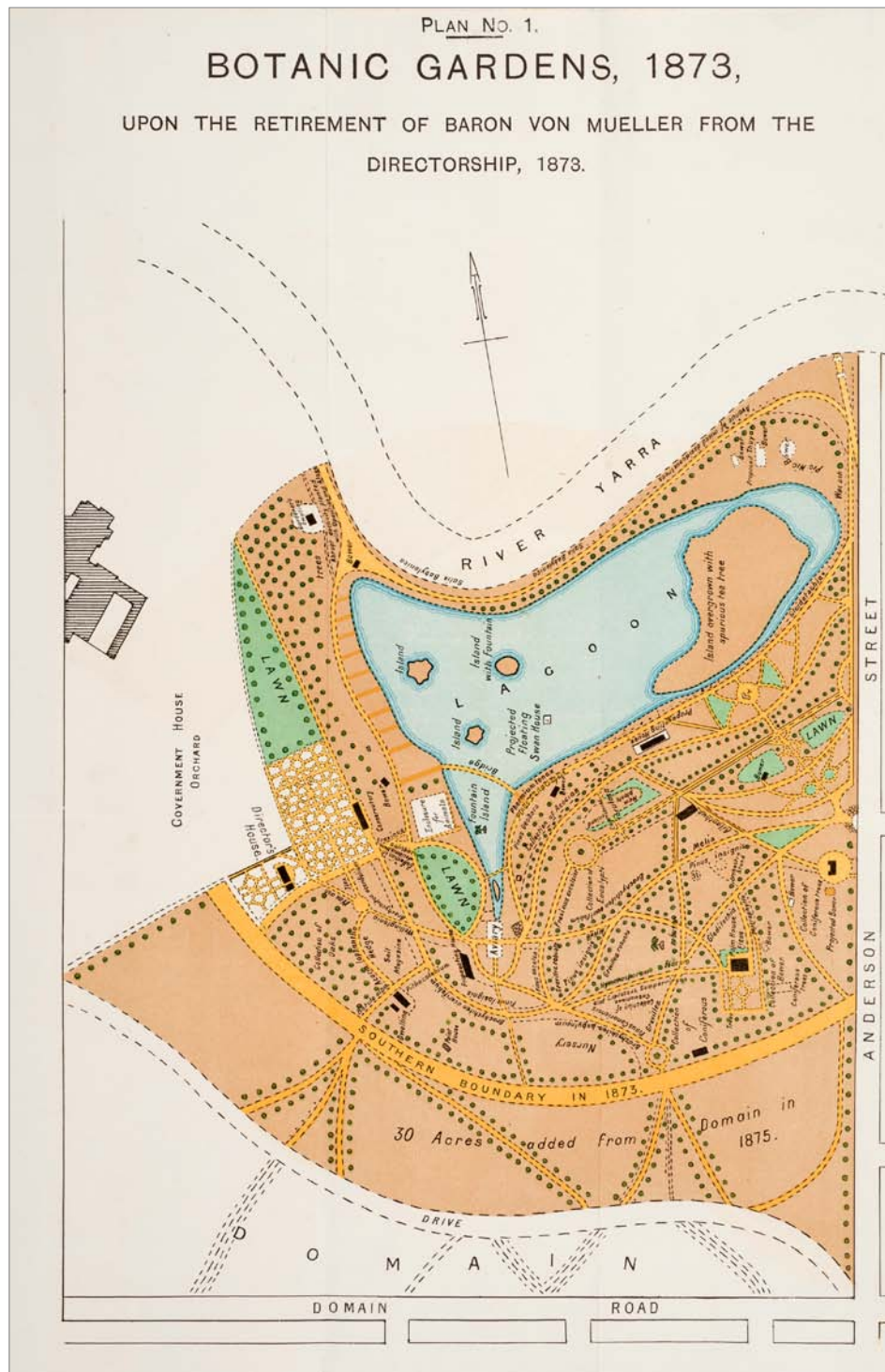


Figure 2a: Royal Botanic Gardens, Melbourne, plan of alterations and additions under the direction of Ferdinand von Mueller, 1873.

Source: Handbook or Descriptive Guide to the Botanic Gardens, Melbourne, 1908 edition. University of Melbourne Archives, William Robert Guilfoyle, 1974.0104, item 2/7.

scientific. The fundamental transformation involved transplanting great numbers of trees of all sizes and creating wide, curvilinear paths with lawns and clusters of plants that replaced the straight, narrow paths lined with trees and spotty planting that had resulted from von Mueller's years as director (Pescott, 1982).

Guilfoyle advanced the propagation and acceptance of Australian native plants (Guilfoyle, 1909) while simultaneously establishing a picturesque quality with the inclusion of rustic ornaments and follies, whose visual qualities arose from Guilfoyle's broad personal experience of exploring colonial frontiers.<sup>8</sup> Finally, as a consequence of an ambitious engineering project to straighten the Yarra River, the major tributary upon which Melbourne was established, Guilfoyle



Figure 2b: Royal Botanic Gardens Melbourne plan of alterations and additions under the direction of William Guilfoyle, 1901. Source: Handbook or Descriptive Guide to the Botanic Gardens, Melbourne, 1908 edition. University of Melbourne Archives, William Robert Guilfoyle, 1974.0104, item 2/7.

incorporated the severed portion of the Yarra River into an enlarged ornamental lake that, once beautified, became a focal point for the gardens (Figure 2b).

Guilfoyle's contributions persist to the present day, and the thematics can be explored in plant material, path alignments, structures and the views and vistas created by landform and the centrally located ornamental lake (Watts, 1983, p 62). The scale of these topographic works, combined with the substantial road and earthworks around the river, is reflective of public park-making in the mid-nineteenth century around the world, with places such as Central Park in New York and Parc des Buttes Chaumont in Paris illustrating how marginal sites were transformed for public recreational use. Toward the end of the nineteenth century, the RBGM also provided the impetus for sweeping changes in a bid to beautify Melbourne around the time of Australia's federation. In the early years of the twentieth century, the area between the gardens and river front was formalised with the laying out of avenues and gardens and construction of several commemorative imperial statues (Whitehead, 1997, pp 52–62).

The radical nature of changes to the RBGM in the latter half of the nineteenth century, along with the wealth of archival material on von Mueller and Guilfoyle's directorships and the Yarra River's engineering at this stage in history, provided the motivation for interpretation in the context of landscape architectural education.<sup>9</sup> Pivotal was the need to inculcate sensitivity and inquisitiveness around how to define 'landscape' in all its complexities. As JB Jackson argued, landscape is:

... a space deliberately created to speed up or slow down the process of nature ...  
a composition of man-made or man-modified spaces to serve as infrastructure or  
background for our collective existence [underscoring] not only our identity and  
presence, but also our history (1984, p 8).

Thus, by using the guide, students were exposed to the idea that agency in the creation of landscape is not confined to the strictures of professional identities, and that engineering and related practices and contingencies often carry equal weight in producing a designed urban landscape. The approach taken in the guide was to present selective threads of the RBGM's history through audio narration, text and a timeline, without attempting to reconcile them into a readily consumable singular narrative. Rather, it was left for the student visitors to encounter and make sense of the changing landscape and to try to reconcile the disparate forces at play: some were the product of design and others a result of entropy and evolution of landscape. In this sense, the guide attempted to make change over time visible while moving through the landscape.

### Choreographed experience

In considering motion as an important element of eidetic experience, we return to the core design challenges of the iPad tour. As identified above, these involved how to immerse and inform the visitor and how to present design intentions and discontinuities in the landscape as a historical record. A third challenge was how to achieve these aims in the context of moving and guiding through large-scale sites like the RBGM, which usually involve choreographed walking and viewing. This act of moving through a landscape has been identified as formative to creating an immersive and personalised experience that also allows for an understanding of



narratives of meaning embedded in a landscape by its designers (Conan, 2003a). However, although this close association between gardens and motion is taken as a given, Michel Conan, in his book *Landscape Design and the Experience of Motion*, asks why there is still relative silence regarding the experience of motion in contemporary landscape design writing. He suggests our understandings and descriptions of motion itself are still inadequate or illusive: '[T]he motion of the traveler does not seem to open aesthetic appreciation in picturesque literature' (Conan, 2003b, p 300).<sup>10</sup>

John Dixon Hunt (2003) has partially responded to Conan's provocation in his analysis of movement in gardens over time. Hunt categorises three kinds of movement that can be found in historical gardens and other designed landscapes: the procession or 'ritual'; the 'stroll'; and the 'ramble' (2003, p 188). These informed the conceptualisation and design of navigation in the guide.

A procession implies ritualised movement that follows a preordained path or purpose. It is prescribed and so it is repeatable and, indeed, is expected to be repeated. The route is encoded in some manner – whether through a formal guide, designated paths, onsite signage or accompanying guides.

The ritual experience of the procession is likely to be undertaken by a group, perhaps with set aims to be accomplished. Within the European tradition, Hunt offers the example of the gardens of Versailles, as narrated by Madeleine de Scudéry in 1669, and later by Louis XIV's guided tours (2003, p 291). Also, the garden of Stowe in Buckinghamshire, England, is seen as a somewhat ritualistic experience, where visits since the mid-1700s were guided by detailed guidebooks that helped draw together the many built and natural elements of the garden into a narrative sequence (Hunt, 2003, p 202). As evidenced by Hunt and other accounts of garden appreciation, the formalised guiding of movement around designed landscapes and gardens through guidebooks and similarly organised means has a sustained history upon which many recent digital reincarnations build (Richardson, 2007).

The 'stroll' and the 'ramble' occur where visitors give themselves over more to the individual sensation of movement. They are, therefore, less purposefully directed than the ritualised procession. Strolls are marked by incidents that 'punctuate and give rhythm to the movement' (Hunt, 2003, p 188). As exemplars of historical strolling sites, Hunt offers the ancient strolling gardens in the Chinese tradition, and picturesque gardens in the European tradition. Strolls are also defined by material incentives, but not prescriptions, to move forward in the landscape, as found in the lakeside route famously created by Henry Hoare at the garden of Stourhead in Wiltshire, England. Stourhead set a fascinating precedent in guiding experience through induced movement and looking, as embedded fundamentally in the gardens itself, including the careful placement and sequencing of statues, follies and landscaped elements, and stone signs inscribed with poetic directions to the visitor (Figure 3).

In contrast, Hunt's third type, a ramble, describes 'the pleasure of movement itself' and involves 'disconnected wandering' that is likely to be solitary and neither prescribed or induced (2003, p 188). Central Park in New York is singled out as a quintessential place for a ramble, and Hampstead Heath in London comes to mind, alongside of course the less 'designed' landscapes of national parks and nature reserves.



*Figure 3: Early example of garden 'interpretation' in the form of stone inscriptions at Stourhead, Wiltshire, England (Hannah Lewi, 2011).*

Categorisations are useful but never tidy. As Hunt acknowledges, many gardens cater for at least two kinds of movement – the processional guided tour in groups with allowance for, and indeed promotion of, informal and singular strolling. For example, paintings and drawings of the gardens at Chiswick House in London commissioned by the owner Lord Burlington show groups of guests experiencing the gardens through both defined pathways and guided tours. But they also show figures obviously deviating from these prescriptions and undertaking their own exploration; and this was apparently encouraged (Hunt, 2003, p 206).

At Alexander Pope's garden, designed by William Kent in Twickenham, England, while visitors might have been invited for a formal guided experience by the owner or designer they were also encouraged to follow personal curiosity by exploring the gardens over the course of an extended stay. Hunt describes this mixed experience as a 'middle mode' (2003, p 207). He also alerts us to the changing status and interpretation of such garden journeys over time, according to shifts in both narratives of design intention and use (2003, p 213). The intention of the self-directed stroll, for example, can become ritualised or more programmed over time, often through conscious heritage and public educational strategies and agendas.

Our research included surveying an archival collection of picture postcards (photographic and wood engravings) held within the State Library of Victoria that depicted mid-to-late nineteenth and early twentieth century views of people in the RBGM. Although these scenes are static representations, they provide extensive illustrations of people strolling along broad gravel paths and vistas framed by exuberant vegetation, topography and flowing swathes of lawn and water. One immediately notices the finery – the parasols and special attire – and the implied actions of promenading, looking or pointing, clusters of people roaming and observing the cultivated scenes or natural objects. These images show the value



placed on strolling through a picturesque setting, a tradition clearly inherited from England and the United States and supplanted into the colonial setting, but one that continues to have relevance today.

The tour of the RBGM was conceived as a programmed walk for small groups of students in a prescribed journey around a carefully edited and selected part of the site. The journey's content was based on a personalised tour that had been led by Andrew Saniga in the RBGM over several years. So it adhered, in part, to the tradition of ritualised processional guiding – both as a mode of experience and as a digital design metaphor. As a design metaphor for organising the iPad guide, a fairly tight choreographed route was defined, with 13 stops in the RBGM and King's Domain. However, within this route was a suggestion of loose exploration as depicted by a red 'lava-like' flow that links the stops together rather than a sharp line of movement (Figure 4). The use of GPS tracking, in the form of a yellow dot on the guide's map to indicate current position, was also included to encourage more free exploration with the security to reorient when required.<sup>11</sup>

Each stop included text narration by Saniga, as the tour guide and subject lecturer, accompanied by images related to the location. The route's itinerary was scripted with limits on time and stamina in mind, and therefore only locations that could most directly illuminate particular historical or design themes were highlighted. No narration or information was given between the 13 stops.

Movement was therefore guided in a somewhat staccato fashion, and perhaps thereby fell into the criticism offered by Stephen Bann that landscaped sites are generally described throughout history as a series of still points rather than a constant flow of moving and looking (2003, p 53). However, in addition to this programmed guiding through a set route, the tour aimed to promote a less structured and sequenced experience, reminiscent of Hunt's 'middle mode' that combines the stroll and procession. So while students followed a predefined larger-

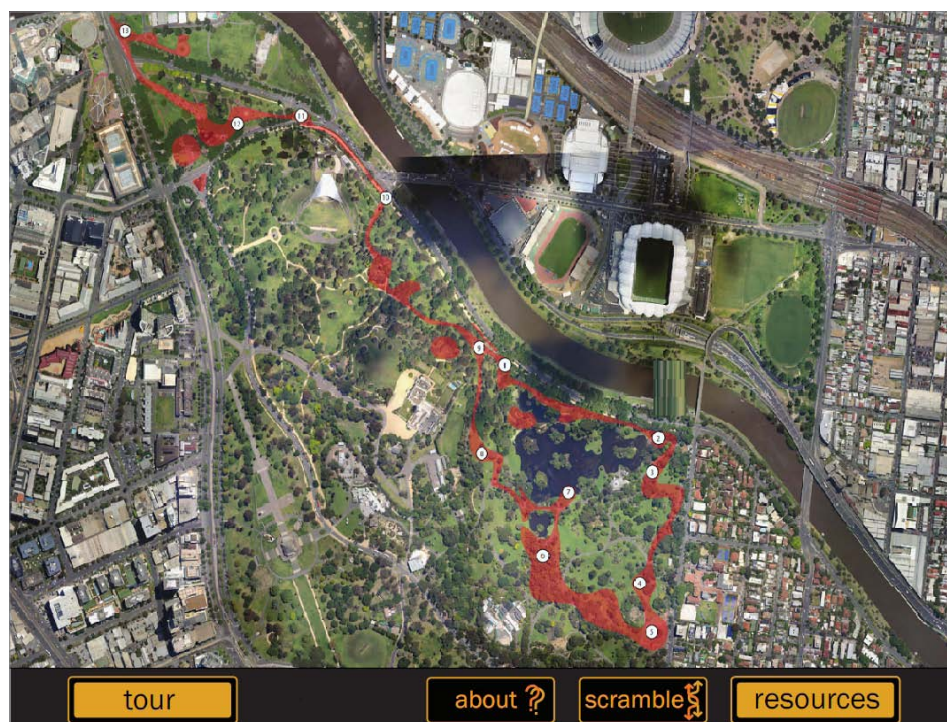


Figure 4: 'Landscapes in Time', orientation map page showing the 'lava-like' walking direction (authors, with assistance of Jacqueline Monie, 2011).

scale procession through the 13 stops, they had freedom to stroll in and around the vicinity of each stop. This movement is embodied both in how the gardens can be physically experienced and moved through, and through the intended virtual navigation of the iPad guide. Aside from the mapped tour with designated stops, a series of thematic resources, gathered and presented in 'drawers', allowed users to wander and pursue archival territories of personal interest.

To provide further navigational choice and promote longer use of the guide, either at or away from the park, a 'Scramble' function was included that was inspired by the possibility of more radically mixing up the guided experience. A series of sound bites cut from the stop narratives, video and still images was collaged together for playing at leisure. The Scramble function was not intended to didactically guide but to create an 'ambient' backdrop for exploring on one's own, and perhaps even to induce more random-like wanderings that evoke the spatial and material qualities of the park and historical episodes that created it.

Paul Carter has described the mode of collage as a legitimate or 'normal' way of tackling representation of knowledge and place in a post-colonial setting: 'collage as a compositional technique is ... to imitate things as they are and, what's more, to mirror them without any obvious addition of meaning' (1992, p 186). The goal of collage in this context is to 'decompose' straightforward linear and direct associations and interpretations and so is apt for the interpretation of a European-styled park in an Antipodean urban setting.

The Scramble option alludes to this messiness of historical interpretation: of unfinished plans and unrealised ideas that are inherent in the making of any layered place over time. It also mimics familiar digital modes such as the 'screensaver'. Plus, in the same way that the random appearance of an image or a sound can lead to serendipity and forced connections, it was thought that Scramble may lead to the invention or multiplication of narratives and, ultimately, the possibility of ideation. Put another way, Scramble encouraged the students to develop their own interpretive framework from a combination of historic data and varied geographic contexts. This outcome supports Gardner and Harfield's (2014) claim that the new era of mobile devices can be relational and the 'personal interpretive framework becomes one that is largely determined by, and contingent on, movement through urban space' (p 202). Alternatively, and perhaps more pragmatically, Scramble also allowed for a more circumspect use of the iPad tour, one that could exist in the background should a user wish to give their primary attention to the site itself and less to the mediation of the iPad.

### Demonstrating historical time through images

To return to broader questions on representing historic landscapes, Casey (2002) has described the historical difficulties faced in encapsulating and presenting experience of designed landscapes and gardens that, in turn, gave rise to interesting and experimental images such as the panoramic and topographical image. Here, Casey makes a useful distinction between the terms representation and presentation. A representation strives to re-present or replicate something that attempts to stand in for the 'real thing'. By contrast, he sees most landscape images as seeking to 'present' not 'represent', as they principally aim to 'show' or 'demonstrate' and interpret, not to replicate (Casey, 2002, p 18). In charting

the challenges of presenting landscapes through time, Casey (2002) analyses an eclectic variety of examples including: Carleton Watkins's photographs capturing the sublimity of Yosemite Park in the United States; John Constable's intimate paintings of the region of Dedham Vale in England; and the tradition of the vertical and horizontal Chinese scrolls showing Chinese landscapes from the Northern Sung period.

The possibilities afforded by digital and mobile technologies offer new twists to this field of landscape presentation, demonstration and explication. Through the digital guide we were interested in testing how easily different types of images and maps could be read and what they would offer or hinder in terms of the immersive and informative experience. At each of the 13 stops, a selection of images and films accompanies the narration and directs users to look at various features and views.

To take a few stops as examples, the first is titled 'Straightening the River' and locates the beginning of the tour at the plaque of the RBGM directors. The first contemporary image in each stop serves as a 'you are here' indicator.

At Stop 1, users are directed to look at the rock escarpment that rises before them as a relic of what was once the edge of the Yarra River. Frequent flooding prompted mitigation work between 1896 and 1900, and the Yarra River was straightened, thereby creating the causeway of Alexandra Avenue. This sliced-off body of water became an enlarged lake in the botanic gardens, and so transformative was this feat of engineering that, without the supplementary archival photography and maps in the mobile guide, users would almost certainly be unable to detect these topographical changes in the landscape before them. The first image depicts the engineering of the new course for the Yarra River and its excavation in 1898, including a boulevard complete with street tree planting already under way.

Subsequent images taken from roughly the same location go back and forward in time (to circa 1870 and 1917 respectively) allowing direct comparison of the Yarra River's course and its associated landscape embellishments. Detailed images of the excavation work, and a Department of Lands and Survey plan, indicate the engineering changes. Perceptual processes mix with the cognitive, providing the potential to see and realise how time has managed to obscure the magnitude of the historic earthworks. The rock escarpment, once worn into existence by the flow of the Yarra River, is now subject to another equally compelling form of gradual decay in its life as an ornamental garden feature. The escarpment faces weathering and erosion as it becomes subsumed in cultivated plants and retained soils and as its geological structure is undermined by their roots.

That such entropic forces of change in a landscape could be made visible<sup>12</sup> by presenting, in situ, an ensemble of historic and immersive information was one of the prime motivations for this research. Such a motivation stems from the importance of reading time in landscape, and reading the impact of industry and infrastructure and the somewhat irreversible, yet often concealed, changes that such interventions bring. As Robert Smithson noted about time and change in respect to Frederick Law Olmsted's design for the landscape of Central Park, New York:



Imagine yourself in Central Park one million years ago. You would be standing on a vast ice sheet, a 4,000-mile glacial wall, as much as 2,000 feet thick. Alone on the vast glacier, you would not sense its slow crushing, scraping, ripping movement as it advanced south, leaving great masses of rock debris in its wake. Under the frozen depths, where the carousel now stands, you would not notice the effect on the bedrock as the glacier dragged itself along ... Back in the 1850s, Frederick Law Olmsted and Calvert Vaux considered that glacial aftermath along its geological profiles (Smithson, 1973, pp 157–158).

At Stop 3, images of the Separation Tree and rest house in 1909 allow comparison with how the site appears today (figures 5a and 5b). This stop was chosen to provoke consideration of the clash between colonial history and the Indigenous presence before the gardens were established. The intention was to prompt this through experience and explanation of the ‘Separation Tree’, which is far older than white settlement but was named in 1850 as the site of celebration of the colony of Victoria’s separation from New South Wales.

The narration reminds guide users of the importance of this setting to the people of the Kulin nations as a food resource and meeting place.<sup>13</sup> The user is then pointed to the rest house nearby as an example of the kinds of timber structures constructed throughout the gardens. Often, in von Mueller and Guilfoyle’s time as directors, structures and rustic ornaments such as the timber seat within the rest house were made with timber from indigenous trees and shrubs cleared from the gardens. Here, physical residues from both colonial and Aboriginal histories are conflated in the construction of a picturesque garden design. The result opens up the possibility for a new reading of this space, in a way partly echoing the sentiment behind what Grant Revell describes in collaborative teaching experiences as ‘the third space’. This is a learning environment where ‘design students and their respective Indigenous collaborators are able to share and understand these critical histories, and accompanying values’ (Revell, 2001, p 15). It is the act of allowing users to position their body – to sit within a space that manifests this history – that provides the opportunity to mentally unpack what they see before them and feel beneath them.

At Stop 5, archival photographs and sketches from Fiji are presented, illustrating Guilfoyle’s design influences for his vision of the garden landforms

*Figure 5a (left): The Separation Tree and rest house, postcard, 1909 (State Library of Victoria).*

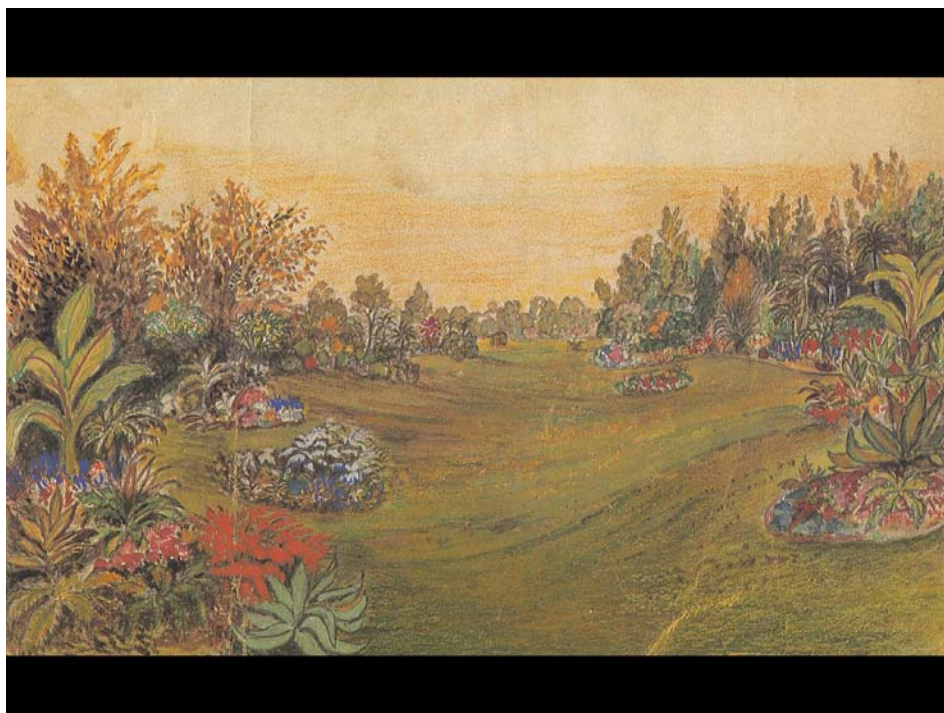
*Figure 5b (right): Contemporary view of the Separation Tree and rest house (authors, 2011).*



and plantings. This stop locates the user at ‘Guilfoyle’s volcano’, which includes a recent reconstruction based on Guilfoyle’s original design for a water reservoir in the form of a crater-like volcano. Guilfoyle’s volcano was intended to be reminiscent of his experiences on plant-collecting expeditions in the South Pacific in the late 1860s (Fox, 2004, pp 135–137) (see Figure 6).

From the available historic photographs, the original design around the time of construction consisted of a large earthwork much like a volcanic crater with bare earth walls. The surrounding garden beds and rockery represented the substance of volcanic islands, with lawns occupying the space in between and aiding the illusion of a flow of lava (Pescott, 1982, p 118). In Guilfoyle’s day, when viewing the volcano from the distant Government House, the smoke from the adjacent wood-fired furnaces of the conservatory (now gone) created the sense that this simulated volcano was indeed still active (Fox, 2004, p 137).

Within the palette of Victorian gardening styles, Guilfoyle’s metaphor represented the special qualities of natural places as discovered through colonial experience in the nineteenth century. Yet it draws upon European traditions of picturesque follies, kinetic sculptures and the choreographed spaces of grottos. As John Dixon Hunt has extensively shown with examples like the imperial hunting lodge of Laxenburg in Austria, such design interventions could ‘elicit a full range of responses [including] historical association ... melancholy ... peaceful reflections ... exotic fancies ... or simple satisfaction ...’ (2002, pp 173–174). The recent reconstruction of the volcano was driven by landscape architect Andrew Laidlaw. It consists of dry gardens and expansive cacti planting in a bid to exhibit water-saving landscape design. The coloured bituminous concrete-paving design graphically mimics the patterns of a lava flow. Given the markedly different treatment to what originated in Guilfoyle’s time, the archival materials within the iPad tour allow the contemporary viewer to identify significant changes over time.



*Figure 6: Guilfoyle’s design inspiration was partly drawn from his fieldwork in the South Pacific and this influenced his design for the Eastern lawn directly below the volcano reservoir c. 1880. (Undated rendering by William Guilfoyle, archives of the Royal Botanic Gardens Melbourne.)*



In addition to the 13 stops, the iPad tour contains other documents accessible as a series of resource drawers in the taxonomy of: contemporary contour maps; key historic maps; a basic timeline; aerial views over time; and a series of archival images (paintings, photographs, sketches, postcards and films) organised under the themes of landform, planting, and social use and structures (Figure 7). The collections aim to help capture how the park has been used over time. In terms of the presentation of these resources, other considerations came into play such as the technical surface of reproduction, the size and framing and where it is viewed, or what Casey has termed the ‘place-of-exhibition’ and ‘place-of-surface’ (2002, p 120). In the digital mode, the framing and scale of images and film are constrained by the screen size of the iPad, but the format is, without doubt, easier to reproduce and manipulate in a variety of ways than conventional guidebooks and printed resources (Figure 8).

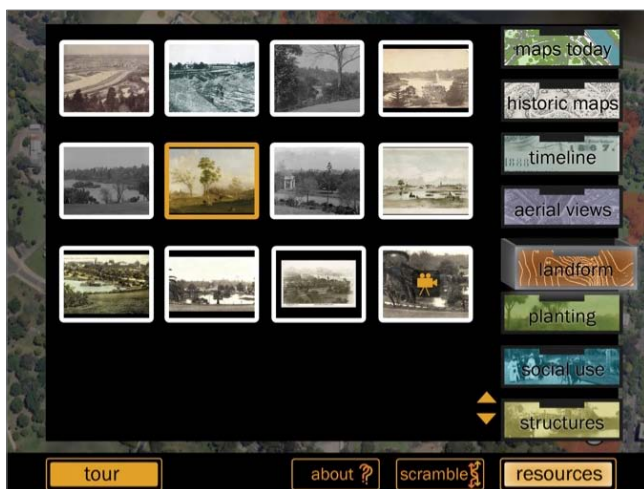
### Conclusions: The challenges of immersive and informative experience

In designing and evaluating an iPad tour for the RBGM, one motivating question was what, if anything, might be new about this emerging digital form of guided landscape touring? As shown in this paper, on the surface, the digital guide delivers information in a format that differs from the approach of the human guide and the guidebook. Importantly, it provides a virtual environment for information to be explored and navigated in tandem with the experience of the physical place. At a deeper level though, as demonstrated in this paper, this new format is responding to longstanding and familiar issues in the visitor’s encounter with historic landscapes.

As with other interpretive devices in museum environments, the extent to which the user seeks an open-ended emotive response, and the extent to which the experience tends towards a more prescriptive cognitive one, is always going to be open to debate. The RBGM has earned an international reputation for its aesthetic qualities. Likewise, the emotional or psychological ‘pull’ the site wields in the geography of Melbourne no doubt interplays with the user’s experience in ways so complex as to elude quantification. It was certainly not the intention in this research to engage in the field of environmental psychology but rather to

Figure 7 (left): ‘Landscapes in Time’, typical ‘stop’ page (authors, 2011).

Figure 8 (right): ‘Landscapes in Time’, resources drawer page (authors, 2011).





*Figure 9: Masters of Landscape  
Architecture students on tour in the  
RBGM using the iPad guide, 2012.*

accept such interplay exists in a manner perhaps best described as ‘experiential gestalt’ (Nettleton, 1990). That is, the experience involves a combined set of schema including cognition, perception, emotion and fantasy, all of which the iPad tour seeks to trigger. Ultimately, the iPad tour was made for design students, and the expectation is that studying the past may inform the development of their own proficiencies as designers capable of generating new ideas.

On the question of how digital guides may choreograph movement and experience through designed landscapes, we refer back to Hunt’s (2003) historical schema of movement types. The iPad tour recreated something of a ‘procession’: the ritualised route inscribed activities to be completed by the students with a clear goal at the outset.<sup>14</sup> At the same time, having never taken this route before, and in the absence of a knowledgeable human guide, the students’ experience was also that of the self-motivated stroll, depending on their will to proceed at each point and punctuated by defined points of interest (Figure 9).

As established in this paper, another issue confronted by the digital tour guide concerns the demonstration of historical time and relates to Casey’s (2002) distinction between presentation and representation. The individual items of content exhibited in our guide drew on various genres – photographic images, maps and films – that depicted garden views at various historic moments. When they are deployed within the iPad tour as the ‘place-of-exhibition’, we suggest that these exhibits align with Casey’s (2002) notion of presentation and demonstration rather than representation, with an emphasis on synchronous comparison and interpretation conducted in situ. Thus, resources that might serve as merely representative copies when viewed elsewhere, here become tools of ‘directed looking’ and interpretation when synchronised with their real counterparts in context. While such juxtaposition is possible with guidebooks and common enough with fixed sign boards, it is the unexpected appearance and vivid alignment with the physical scene as the visitor moves through the site that characterises this particular comparative experience.



*Figure 10: Student and lecturer hugging a tree in the Royal Botanic Gardens Melbourne, a teacher's ploy to encourage students to engage with their context. Xin Fu, Master of Landscape Architecture student, University of Melbourne, drew the event to illustrate the immersive potential of fieldwork.*

In conclusion, many productive precedents are found in modes of touring and presenting gardens in the past that remain instructive in addressing anew the challenges of offering both an immersive and personalised experience alongside an informative guide to a designed landscape. For example, to revisit the extraordinary stone signage at the garden of Stourhead in Wiltshire, England, Michael Charlesworth suggests these inscriptions 'invite the visitor across a crucial threshold that separates the mythic domain of the garden from real space ...' (2003, p 285). It is this motif of the 'inscription' (whether instructive or poetic) as a guiding voice that has persisted in many modes of garden experience and, arguably, makes us feel differently within designed gardens 'compared to how we feel in other "everyday" spaces' (2003, p 285). Even within the formal task of university fieldwork, we ultimately wanted students to benefit from the more didactically illustrated experience of 'historical' time, as offered by the resources in the iPad guide, but also to retain some semblance of the personal and perhaps even the poetic experience of their own time spent in the gardens (Figure 10).

This paper has described how the creation of a mobile digital guide for a particular designed landscape and its history presented challenges that were linked to centuries of attempts to guide visitors around designed landscapes. It is also perhaps not much of an exaggeration to state that the attempt to design, build and implement a mobile digital guide for the RBGM encountered the same fundamental issues inherent in designing a landscape itself. That is not to conclude that digital mobile guides bring nothing new to historic landscapes, for they introduce increased volumes of content, ready access to rich and vivid images and film collections, connectivity and location-aware functions. These all bring new opportunities. At the same time, the guides continue the lineage of shaping the productive exchange between people and landscapes.

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## NOTES

- 1 Studies of the teaching and learning objectives and findings have been published elsewhere and are covered in the project website. To access, see <http://mobilefieldworklearning.wordpress.com>
- 2 To access, see [www.imamuseum.org/blog/2010/06/07/going-mobile](http://www.imamuseum.org/blog/2010/06/07/going-mobile)
- 3 To access, see [www.nybg.org/exhibitions/2012/monet/index.php](http://www.nybg.org/exhibitions/2012/monet/index.php)
- 4 John Weber describing the work of Janet Cardiff ('The Telephone Call', 2001) at: [www.cardiffmiller.com/artworks/walks/telephonecall.html](http://www.cardiffmiller.com/artworks/walks/telephonecall.html)
- 5 The issues of socialised learning using mobile technology have generated a growing field of educational technology scholarship. This is engaged with in other accounts we have written and covers the process of implementing mobile apps for higher education teaching and learning, but falls outside the historical scope of this paper.
- 6 For other studies on the iPad format see, for example, Lewi and Smith (2012).
- 7 The expansiveness of the King's Domain and its associated topographic richness mean that one's sense of orientation, movement and location is correspondingly reliant on landmarks and maps for way-finding. To an extent, our research involved contemplation of cognitive maps as a record of the experience of landscape and as a central driver in formulating the route of the walk.
- 8 For example, Guilfoyle designed a new water reservoir in the shape of a volcano, and the neighbouring rockery, garden beds and lawn were laid out to represent the materiality of volcanic islands and lava flows. He had formed such imagery when he travelled to islands in the South Pacific.
- 9 Under subsequent directors throughout the twentieth century, the design foundations set in the nineteenth century were largely perpetuated.
- 10 Adding to this is the complex task of capturing a more nuanced, subjective and gendered understanding of the experience of the contemporary moving body in a historic setting such as a public garden.
- 11 Curiously, though, it was those students who were not given the GPS marker who appeared to interrogate the space more actively and construct their journey. Those with GPS seemed to move more slavishly to the prescribed route.
- 12 The authors refer here to Robert Smithson's important contributions to earthworks and art practice in the 1960s and that have been generated from Smithson's writings on this topic (see Smithson and Sky, 1973).
- 13 When Melbourne became a self-governing city in 1842, new policy was formed that resulted in the progressive exclusion of Indigenous people from white society. This continued to be enacted concurrently with the first park directorship under the scientist Ferdinand von Mueller.
- 14 As noted above, the inclusion of GPS seemed to strengthen this processional experience by allowing the group to follow the track with little deviation or inclination for exploration.



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# Glitterosophy: The Good, the Bad and the Ugly

BRENT GREENE AND HEIKE RAHMANN

Urban renewal projects in Australia are increasingly favouring the creation of new, sleek and conform design outcomes. With few exceptions, most projects approach sites as ‘terra nova’: they eliminate pre-existing ecological and cultural conditions and replace unappreciated features with generic but generally appreciated solutions. This paper criticises these developments and argues that the destruction of interstitial qualities purges cities of ecological, architectural and cultural conditions that could be built upon to generate more diverse urban landscapes. Recent theories in urban design, art and culture have started to express a growing interest in the concept of the *other* and the marginalised. Most notable in this discussion is French landscape architect Gilles Clément’s concept of the ‘third landscape’, which aims to redefine the aesthetic value of interstitial environments.

This paper uses Clément’s framework as a starting point to explore alternative approaches to issues of contemporary urban renewal and the potential of remnant vegetation as a counterbalance to the increasingly homogenised urban landscape. Through the lens of weeds, issues of aesthetics and otherness are explored across two case study projects: Fishermans Bend in Melbourne and Sullivans Creek in Canberra.

The exploration is based on a design research methodology that includes composite mapping and testing of a speculative design proposal. The findings suggest that invasive plant species are imperative constituents of contemporary urban space and have value in their own right. By shifting the design perspective to acknowledge the presence of interstitial ecologies in the built form, a foundation is provided from which a progressive landscape aesthetic supporting diversity over homogeneity can evolve.

Australian landscape architecture’s traditional design language is one of restorative beauty and ornamentation, which evolved from the formative years of the profession and focused on the distinct qualities of the Australian landscape (Saniga, 2009). Although local architecture has endeavoured to shed its fascination with the beautification of structures, landscape architecture continues to align itself with the ornamentation of public spaces through highly synthetic representations of nature. Contemporary design theory challenges this perspective and suggests that human beings, in conjunction with landscape processes, continually rework their environments (Solnit, 2007). The resulting issue is that what we perceive as ‘natural’ often stands in opposition to how environments evolve and is based entirely on what a culture determines as beautiful and ugly, worthy and worthless (ibid, p 278).

While contemporary urban environments in Australia consist predominantly of green lawns and mature elms, traces of the *otherness* are also visible; these are the landscape components that sit outside the normal perceptions of space.

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## KEY WORDS

*Third landscape  
Landscape infrastructure  
Urban design  
Urban ecology  
Design research*

## REFLECTION

*Otherness* is used in this paper to describe the following landscape features: pioneer plant species, redundant architecture, infrastructural landscapes and minority cultures. The paper asks if the practice of engaging with otherness through design can provide an opportunity for challenging traditionalist perspectives of landscape aesthetics in the city. The question is based on the studies of French landscape architect Gilles Clément who explores otherness in the landscape through a design philosophy that he defines as the ‘third landscape’ (cited in Rocca, 2008, p 27):

It includes leftover territory, both rural and urban, and untilled zones: the edges of roads and fields. Of industrial areas and nature reserves. It is the space of indecision, and the living things that occupy it act freely. To see the third landscape as a biological necessity that influences the future of living things modifies our interpretation of territory, attributing value to the places that are normally neglected.

Clément’s philosophy is based on two principles. The first acknowledges the ecological value of alternative urban space. The second reveals our own cultural perception of these spaces and aims to challenge the status quo of neglect. While *other* urban landscapes are often defined as ecologically subordinate when compared with naturally evolved landscape artefacts (Katz, 1993), Clément reveals their innate beauty by designing alongside them complex environmental systems. This design move allows the landscape to transcend its visual aesthetic by celebrating interstitial ecologies as one component in a larger dynamic process.

Theories on contemporary landscape aesthetics argue it is this dynamic process – and not visual character alone – that should inform our landscape sensibilities. Saito (2007), for example, suggests that urban spaces of insignificance should establish a progressive aesthetic value in relation to ecology and culture. Berleant (2005, p 14) continues that experiencing these spaces:

... enables us to grasp the environment as a setting of dynamic forces, a field of forces that engages both the perceiver and perceived in dynamic unity. What is important are not physical traits but perceptual ones, not how things are but how they are experienced.

As such, Berleant (2005) outlines a methodological framework that expands the perception of the *other* in urban landscapes into a tangible and adaptable form. This may be regarded as a leap forward from traditional landscape aesthetics (Carlson, 2010).

These conceptual advances have moved into a range of international landscape design projects that challenge the traditional aesthetics of urban landscapes. New York’s High Line (opened in 2009), for instance, uses existing ‘weedy’ seed stock for development through planting schemes. Another example is HuaXin City (developed in 2004) in the Shanghai metropolitan region where German ecological engineer specialists Janisch and Schulz converted the city’s existing labyrinth-like canal system into a linear wetland. Primarily designed as a wastewater management facility, the canals also act as open space and valuable plant and animal habitat.

By demonstrating the dynamism of landscape processes, these projects have become an educational tool that advocates the value of otherness in the urban

realm (Stokman, 2008). It is their specific aesthetic language, however, that has exposed limitations. In the High Line project, the Dutch planting designer Piet Oudolf imposed a certain design aesthetic by strategically limiting the application of self-seeders in the landscape (Pearson, 2013) and thus eliminating process-based succession and alterations to the design. Moreover, the HuaXin City canal system reconstituted biocentric ecologies to beautify the aesthetic from the anthropocentric perspective. As such, the potential of otherness is superseded by a specific representation of urban nature rather than being used as an inherent component in the urban landscape.

In comparison with these projects, in Australian landscape architecture the engagement with pioneer ecologies is largely absent, as demonstrated in recent publications on the domestic profession (Raxworthy & Ware, 2011). Likewise, Saniga's recently published history of Australian landscape architecture examines landscapes that were mostly restored through the reproduction of naturalness (2012, pp 201–206). The only exception was the Brick Pit at Millennium Parklands in Sydney from 2005.

In Australia, intensive measures are applied to restrict the use of pioneer plants. The Australian Weeds Committee (2013) documents a list of state and territory legislation that dictates the forced removal of and control measures for invasive species across the nation. The Australian Weeds Strategy (Natural Resource Management Ministerial Council, 2007) provides an updated framework to prevent the incursion of invasive plants in Australia. The annual Australasian Weeds Conference is dedicated to enhancing this perspective, highlighting the ecological damage that invasive plants inflict on the local and international landscape (Preston et al, 2006, p 1). Furthermore, national landscape groups such as Landcare Australia promote case studies in which other urban spaces have been successfully 'enhanced' through the removal of weeds (Landcare Australia, no date).

This paper explores the potential of the *other* as a catalyst for cultural change in Australian cities by recontextualising landscapes as systems of infrastructure. In regard to the application of pioneer species, the authors acknowledge that, in some situations, weeds are a threat to sensitive endemic ecologies that remain in the rural and urban wilderness areas of Australia. As such, the application of invasive plant species could also negatively impact on established fauna (Macfarlane & van den Ende, 1995). Furthermore, this paper recognises that the application of weed-based design may result in homogeneous (although adaptable) urban ecologies similar to those the authors set out to question in the beginning. It is not the authors' intention to replace current practices but rather to see the third landscape as an opportunity to enrich the diversity of urban landscapes. This paper argues that the application of *otherness*, specifically pioneer plant material, may be the missing link in Australian urban landscape architecture.

Theoretical positions and design precedents that argue for the inclusion and mediation of alternative space are discussed first in this paper, before two case study projects are examined that engage with the issues through the method of design research. It has been argued that design research is a contemporary scholarly method of creating knowledge (Ellison & Eatman, 2008) that combines methods and techniques with 'rational problem solving' or 'intuitive aesthetic'

acts (Salomon, 2011). In addition, design research and the artefact go beyond a mere installation when applied as a method in creative research (Downton, 2003; Rust et al, 2000). Groat and Wang (2013) outline the basic structure for design research, which includes a problem, the future and generative aspects – all of which conclude in a proposal for an artefact(s).

### Positioning the *other*: The good, the bad and the ugly

The *other*, when expressed as landscape infrastructure, is a complex system of varied components: pipes, rail and power lines, storm and sewage channels, power plants and structural debris. Similar to biology, the complexities of our built environment mimic a taxonomic hierarchy, with each component becoming increasingly dependent on the other. The allegoric relation to the biological world further extends into a cultural value system. Just as some plant species are classified as good or bad, indigenous or invasive, this bipolar value system is also assigned to types of landscape infrastructure. For example, a rehabilitated creek may be appreciated as ecologically sound, whereas an engineered stormwater channel may be evaluated as ecologically subjacent.

However, even the filthiest infrastructure – the site of the worst nuclear catastrophe on earth – has demonstrated a capacity to evolve in ecological complexity. Nowadays, the area within the Chernobyl Exclusion Zone is indistinguishable from the surrounding endemic landscape. Paradoxically, as Mycio (2005) argues, the nuclear fallout sustains an increasingly diverse ecosystem of plants and animals. In this instance, culture may define a toxic landscape as bad, yet the landscape process disregards this perspective and adaptation provides a potential opportunity. In nature, there is no dichotomy – no good or bad, worthy or worthless – only a series of evolutions that allows for plants and animals to adapt to new challenges as they are revealed in the urban form (Del Tredici, 2010).

The idea of landscape as infrastructure is not new in landscape architecture. The exploration of hybridised open space was discussed in 1996 when designers proposed the ongoing adaptation of technology, landscape and design as integral parts of the urban form (Strang, 1996). By proposing the combination of infrastructure and landscape, architects demonstrated the inseparable relationship between landscape processes and the built form.

A few designers have taken the intellectual leap to construct interventions that engage with existing conditions so despicably ugly that all cultural conventions of aesthetics and landscape are challenged. One example is the AMD&ART Park in Vintondale in Pennsylvania (developed 1994–2005). Created by a multidisciplinary team of sculptors, hydrologists and landscape architects, this project unpretentiously engages with the derelict and highly toxic post-industrial landscape. Rather than hiding the industrial sludge by transporting material off site, the designers actively engaged with the toxicity over a series of terraced wetlands. As the Pruned blogspot (2008) describes, ‘this [project] isn’t so much a restoration or a reclamation as it is redemption’. In describing the contaminated wetlands as ‘technicolour poison’, the authors further suggest a whole new meaning of beauty, naturalness and landscape infrastructure.



If local designers applied similar approaches on a broader scale, could our urban landscapes develop a greater degree of ecological complexity? This could only be achieved if the cultural perception of urban nature was to evolve, allowing a wider application of landscape types in the city. Australian landscape architect Richard Weller suggests this perspective is the next evolution in landscape design, ‘an ecology free of romanticism and aesthetics’ (2006, pp 79).

Creative researchers and landscape theorists continue to substantiate Weller’s argument. Ignasi de Solà-Morales Rubió’s *Terrain Vague* (1995) explores the concept of abandoned and obsolete landscapes, arguing that the fine arts have been more successful in exploring these spaces through practice. One contemporary example is the book of Edward Burtynsky’s photographs *Manufactured Landscapes* (Pauli, 2003), which combines the toxicity of industry with a highly aestheticised visual narrative through photography. Burtynsky’s compositions obtain a level of ambiguity and seductive otherness that make the extent of the industrial contamination more tangible, allowing for more than one meaning to be derived.

From the design perspective, landscape theorist Elizabeth Meyer (2008) suggests designers often enforce a specific programme on a site, eradicating its inherent otherness in the place of stylised form, whereas art reveals and argues for its continual existence. As such, Meyer advocates the recognition of art in landscape practice both conceptually and compositionally, arguing it is through the artistic lens that the discipline can grow.

How can landscape architects use design to challenge cultural perceptions of urban landscape and beauty on a broader scale? Through the application of the *other*, designed landscapes can be framed as powerful retaliators against the domineering aesthetic and cultural order (Meyer, 2008).

This material-scape is explored in the sections that follow. Primarily, the *weed* itself is examined as a tool by which to challenge conventional landscape aesthetics in Australian civic spaces. The two case studies propose alternative readings of the urban context. The first (Fishermans Bend in Melbourne) uses the composite mapping technique, which allows for the concurrent reading of historical and contemporary imagery, revealing aspects of a landscape that are otherwise hidden. The second (Sullivans Creek in Canberra) applies composite mapping as a way of generating physical form for engaging with larger-scale landscape processes.

### **Fishermans Bend, Melbourne**

Fishermans Bend is a 200-hectare industrial park situated on the southern bank of the Yarra River in Melbourne. It is characterised by low- to medium-density industry, high-density housing and a vehicular-based transport system with *other* landscape materiality that includes a highly engineered and polluted river system (Melbourne Water, no date), toxic soils (Places Victoria, 2013, p 19) and an extensive list of invasive plant species (Australian Weeds Committee, 2013).

Hoping to limit Melbourne’s rapid urban sprawl, the Victorian State Government identified the site, which is as large as Melbourne’s central business district, as an area suitable for urban renewal with medium- to high-rise development to provide up to 15,000 new dwellings (Johanson, 2011). Before

renewal can start, Fishermans Bend will undergo environmental assessments and decontamination procedures. The master plan, released by the Victorian State Government in September 2013, has yet to specify what decontamination methods will be applied (Places Victoria, 2013, pp 19–27). This lack of information suggests the overhaul of the precinct will engage little with existing landscape features and will not understand Melbourne’s open space network.

Referring to the heavily criticised Docklands development in Melbourne, Dovey (2005) states that previous large-scale urban developments in Melbourne have not successfully produced convincing urban design outcomes. Before its construction, Docklands, Australia’s largest urban renewal project to date, faced similar challenges to those of Fishermans Bend. Since its inception in the 1990s, critics have considered the Docklands redevelopment as a badly missed opportunity for urban design (Dovey, 2005). While central Melbourne is praised as a city of intricacy because of its human-scale architectural interventions, the Lego-like architecture in Docklands creates a sterile entity of its own. Hopes that Fishermans Bend will depart from the developer-driven agenda seen in Docklands and provide an alternative approach to a renewal project of ‘international significance’ (Cook, 2013) are unlikely to be fulfilled. By rezoning the precinct from industrial to residential use in 2012, the government has, instead, set up the redevelopment to follow the path of Docklands (Shaw, 2012).

### *Mapping the hidden qualities of Fishermans Bend*

How can landscape architecture reconceptualise the strategies for Fishermans Bend and allow design that will engage with the area’s industrial past? If the theories discussed above are taken into consideration, how can the material-scape of the *other* be mediated? International precedents in landscape architecture offer valuable strategies and tactics that engage with all aspects of derelict sites regardless of their cultural or aesthetic predisposition.

In Germany, the Emscher Park network is an exemplary illustration of this approach, mediating the junction of nature and culture through sensitive design. The most celebrated example, Landscape Park Duisburg-Nord, designed by Latz and Partners in 1991, was envisioned in the same era as Docklands. In contrast to Docklands, this project develops a striking conceptual and aesthetic framework that appreciates the visual, experiential and ecological qualities of the post-industrial landscape. Here, the *other* components of the abandoned site (polluted soils, weeds and derelict infrastructure) are retained to preserve a sense of memory and identity. Moreover, instead of forcefully ‘cleansing’ toxic substrate, the phytoremediation method was applied allowing a process-based decontamination programme to mediate pollutants. Retaining architectural structures also became central to the intervention, showcasing the site’s industrial heritage to future generations.

This design move in itself is not new and can be traced back to earlier projects such as the Gasworks Park in Seattle, designed by Richard Haag in 1975, or even Parc des Buttes Chaumont in Paris from 1867, designed by Jean-Charles Alphand. These projects have formed a body of work that demonstrates distinctively how industrial sites can be treated to promote alternative concepts of an industrialised nature and aesthetic.

By taking the premise that the renewal of Fishermans Bend must include the theoretical lineage to avoid becoming another market-driven intervention akin to Melbourne's Docklands, the following paragraphs outline the exploration and subsequent consequences of the distinct ecological and aesthetic value on the potential development of this precinct.

The design research method of composite mapping was applied to reveal the hidden qualities of the Bend's industrial landscape, by overlaying a range of different maps and spatial graphics (Figure 1). Data was sourced from the Fishermans Bend urban renewal draft released by Places Victoria (2013), and historical and contemporary ecological information was sourced from the Victorian State Government's Department of Environment and Primary Industries interactive map software (2013) and the State Library of Victoria digital map collection (2013).

In opposition to the belief promoted by the media that Fishermans Bend is a polluted and ecologically damaged precinct (McCauley, 2013), the mapping identified two unforeseen elements. First, it revealed an overlooked urban ecology comprising both noxious weeds and vulnerable species. This is a consummate example of the third landscape. The noxious weeds, cape weed (*Arctotheca calendula*), flax-leaf broom (*Genista linifolia*) and moth plant (*Araujia sericifera*), are thriving in the contaminated soil and support endemic fauna such as the Australian pied cormorant (*Phalacrocorax varius*), the eastern great egret (*Ardea modesta*) and vulnerable amphibians such as the growling grass frog (*Litoria raniformis*). This revelation supports the fact that industrial space can provide important habitat for urban wildlife (Niemelä, 2011). The discovery suggests Fishermans Bend sustains a series of complex ecological processes and should not be treated through large-scale engineering or decontamination solutions.

Secondly, the mapping identified that the precinct, despite its history of heavy disturbance, is still an active part of a larger wetland system. Because of the intensive manipulations of Melbourne's landscape in colonial times (Otto, 2005)

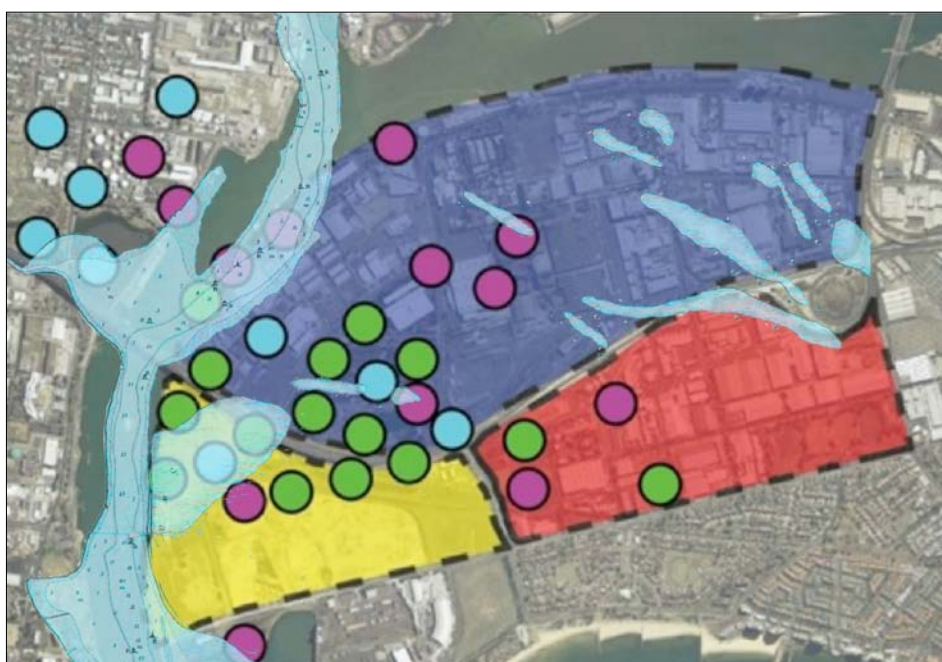


Figure 1: (2013) Fishermans Bend composite map. The circles indicate the location of various indigenous animal species and their relationship to the industrial landscape. The parcels of land marked in yellow and red are poised for redevelopment, with the original Yarra system and corresponding wetlands overlaid in blue.

– most notably the interference with the topography and natural water bodies – the wetland system only reveals itself when major areas are inundated in heavy storms. This phenomenon is likely to occur more frequently in future, based on climate change projections that imply extreme rainfall events in Melbourne will increase by 5.9 percent by 2070 (Australian Government Department of Climate Change, 2009, p 22).

The mapping observations suggest that the original hydrological connections have been retained and are still functioning. Considering the evolution of the Yarra River's physical form and reduction of water flow by up to 50 percent (Otto, 2005), this site's ability to inundate is testament to the reality of landscape processes in the urban form.

### *Awesome filth: Speculations about an alternative future*

Taking these explorations into account, it appears Fishermans Bend has the potential to perform as a programmed space with landscape infrastructure that may include performative wetlands and bioswales. Lessons can again be learned from Docklands. There, a recently revealed proposal for a new park adjacent to the Yarra River and Moonee Ponds Creek by no means engages with the surrounding ecological systems. Instead, a purely programmatic approach is being taken in the design. Upon announcing the new park, Planning Minister Matthew Guy lauded the design as a 'fantastic new sporting and community hub' (Ainsworth, 2013) that will revitalise the precinct for future generations. However, one may question the Minister's decision to approve a new football oval with the 50,000-seat Etihad Stadium a mere 2 kilometres away.

This example suggests that, if the government is serious in its proposal to apply new strategic and design approaches in the development of Fishermans Bend, any proposed intervention should inspire design strategies that aim to celebrate – not reconstitute – the existing landscape character. An instructive environmental assessment could form the basis of subsequent design iterations, revealing what aspects of the Bend should remain untouched or protected and what could be reclaimed for development.

As mentioned, a scheme like this could unfold through various landscape typologies. However, all planned interventions should be accountable to the unique site conditions, which include two primary components: first, an endemic faunal ecology that has come to depend on exotic plant species and, second, the maintenance of a landscape susceptible to inundation by the Yarra River. In the first aspect, the weed lends itself to a range of spatial approaches. One option is to intervene 'actively' and establish supplementary pioneer plants that sustain endemic animals and increase their habitat. Ecological programmes can operate simultaneously with decontamination through the process of phytoremediation. This method has been proven successful through science (Fotiadis & Lolas, 2011) and is considered cheaper economically than alternative purification methods (Niemelä, 2011). In addition, peer-reviewed scientific research on Australian weeds, such as common ragweed (*Ambrosia artemisiifolia*), creeping thistle (*Cirsium arvense*) and curly dock (*Rumex crispus*), has demonstrated their ability to extract contaminants from polluted substrate in a disturbed landscape (Ficko et al, 2010).



The second consideration is the typology of the manipulated wetland, a landscape form that mediates inundation through landscape processes. Fishermans Bend, given its location on the Yarra River estuary, has flooded historically and will continue to do so in the future (Presland, 2009). Any intervention should mediate the landscape processes and allow for resilient forms that inundate, purify and illustrate the relationship between human habitats and environmental processes that occur concurrently (Stokman, 2008). Precedents suggest two possible approaches for this situation. In the first scenario, projects such as Erie Street Plaza in Milwaukee (designed by Stoss LU, in 2010) demonstrate that as flooding occurs the landscape can continue to function as open space as well as infrastructure.

The second approach applies a passive strategy whereby parcels of Fishermans Bend could be manipulated at a limited scale to continue functioning as a valued urban habitat. Similar to Olmsted's Emerald Necklace (Boston, 1860s), Melbourne's 'dirty necklace' could be designed as a series of wetland systems dispersed over the Bend's 200-hectare landscape. The exhibition of dirtiness, in this instance the mediation of polluted waterway systems through landscape infrastructure, would openly demonstrate the potential of *otherness* in urban ecological processes. These fluvial habitats have the potential to consolidate the development's aesthetic and retain existing architectural character while enhancing the habitat range of species living there.

As argued above, the inherent *otherness* of the site should be retained – a concept that should also be extended to the redundant architecture. The treatment of historical sheds at Docklands demonstrates that the government considered them of little or no cultural value. There, old sheds were either completely demolished or renovated to become private offices with limited public access. However, considering Melbourne's short industrial history, the shed is an important relic that demonstrates Melbourne's growth from an insignificant British colony to a highly urbanised city. Melbourne has already lost a significant stock of historical buildings through the Modernist period, which has devalued the city's story and identity (Dovey, 2005). Eliminating or forcefully gentrifying these structures will erase the industrial heritage of Melbourne's ports. Many of the industrial buildings in Fishermans Bend are more structurally sound than the old sheds removed in Docklands. While the current master plan does not specify how the new precinct will engage with the industrial (built) heritage (State Government of Victoria, 2013), other Australian examples, including Ballast Point Park (Sydney, 2009), suggest that interventions can retain architectural heritage and instil a sense of place and cultural reflection for the future generations (Maskit, 2009).

### Sullivans Creek, Canberra

In 2011, the Australian Capital Territory (ACT) Government launched the international CAPIThetiCAL design ideas competition as part of the lead-up to the 2013 centenary of Canberra's inception. The competition was supported by the Australian Government and Australian Institute of Architects. It encouraged architects, landscape architects and urban designers to critically engage with the Burley Griffin Plan (the original concept plan for Canberra's design) to search for

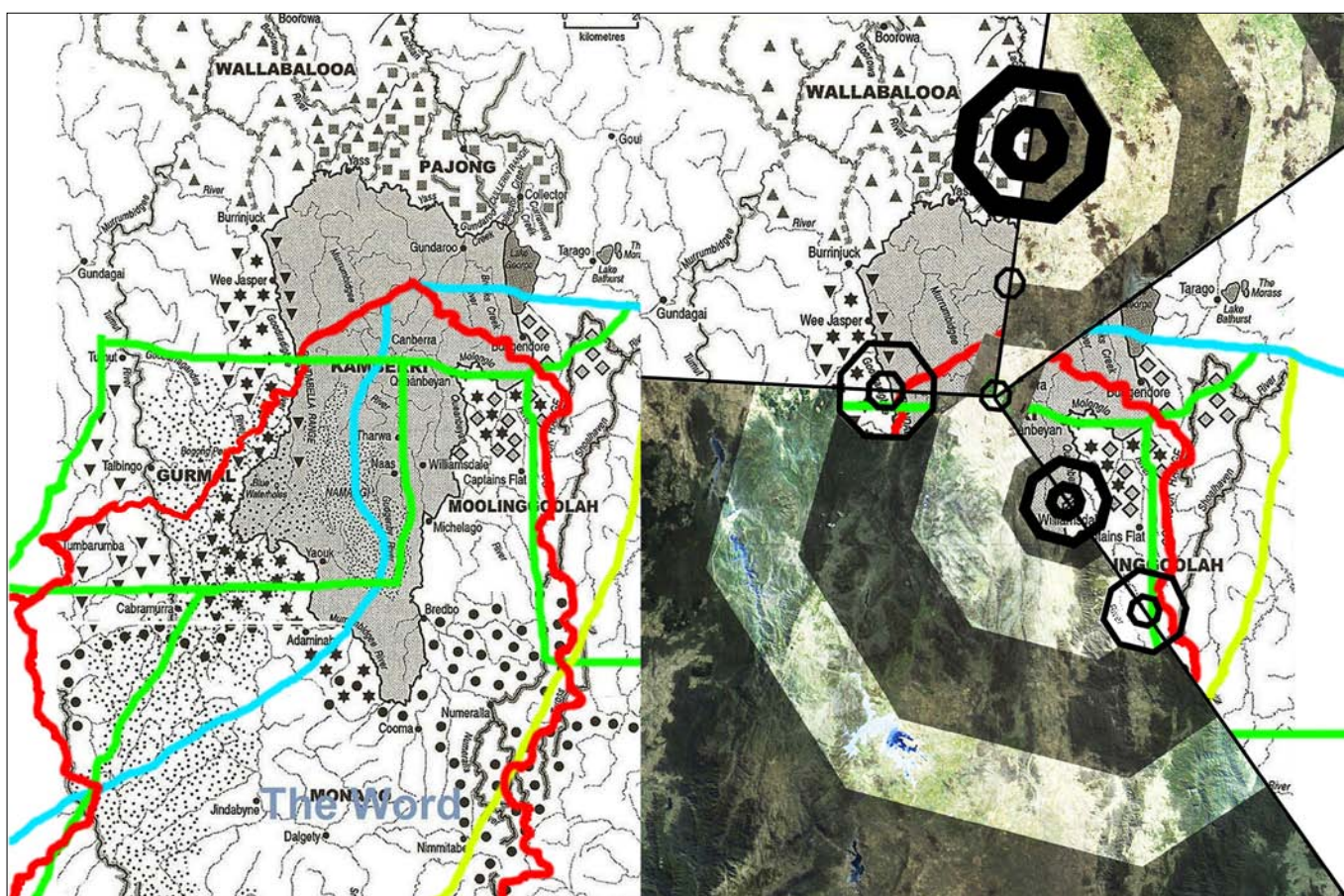
new – and explicitly hypothetical – ideas to reimagine Canberra in light of the contemporary political, cultural and ecological challenges.

The following section discusses *Triffid City*. This is a speculative design proposal that uses components of the third landscape to investigate Canberra’s landscape aesthetic as a response to its political and cultural agendas. Through the lens of weeds, the project explores how the concept of otherness can contribute to contemporary urban landscape and reflect a more diverse and democratic city.

Composite mapping was used to uncover spatial, political, cultural and ecological issues. Based on this exploration, design interventions were conducted at three sites to test how the integration of landscape processes could inform an alternative reading of the capital city. The mapping revealed that Canberra’s post-colonial settlement pattern pushed the *other*, in this instance the Indigenous nations, from the central city, a landscape that includes Lake Burley Griffin and Parliament House (Figure 2).

As a colonial society, the Australian nation has a complex relationship in regard to landscape ownership, a perspective that differed markedly between Indigenous nations and European settlers and that continues in Australia’s post-colonial cities today (McGraw et al, 2011). This tension is exacerbated by the fact that Australia is the only settler society not to have signed a treaty with Indigenous landowners, which in turn has established a landscape of ‘disquietude’ between ‘the displaced and those who have displaced them’ (Harris, 2003, p 71). Moreover, given that the 2011 Australian Indigenous population accounted for only 2.5 percent of the total population (Australian Bureau of Statistics, 2012), it could be argued that,

Figure 2: (2012) Canberra composite map demonstrating the traditional fluxing tribal boundaries (the red, blue, green and yellow lines) of the Indigenous nations of the ACT (left) and their subsequent interruption following the Burley Griffin design (right). The hexagonal graphic aims to represent Burley Griffin’s impact on the broader landscape adjacent to central Canberra.



as a displaced minority, the Indigenous nations are still considered as the *other* in the contemporary Australian city. This imbalance, however, is a relatively new statistic because, before colonial occupation, central Canberra was home to six Indigenous nomadic tribes. They referred to their country as Ngambri. Their national boundaries were dynamic, expanding or contracting, depending on political negotiations or changing societal configurations, for example, through intertribal marriages (Ngambri Inc, no date).

Following European settlement, the region was renamed Canberra, which was derived from the Aboriginal name *Kamberri* meaning 'meeting place'. Through the settlement process, the existing ecology was destroyed, predominantly to support extensive livestock farming. Canberra is an exemplary case where design was used as a political tool to eliminate one culture and substitute it with another (Dovey, 1999, 2010). The replacement was initiated in 1911 when the design by landscape architects Walter Burley Griffin and Marion Mahony was selected as the winner of the Federal Capital Design Competition, which made Canberra Australia's first entirely planned city. The construction of axial road networks, satellite suburbs and Lake Burley Griffin erased a series of Indigenous ceremonial sites within the central business district and displaced the Aboriginal culture from Australia's new capital. Furthermore, it established a new landscape influenced by classical aesthetics and ideas of the City Beautiful and Garden City movements (National Archive of Australia, no date).

At the same time, Canberra was divided into two jurisdictions that defined Parliament Hill and Lake Burley Griffin as federal land, with the surrounding landscape governed by the ACT. These boundaries still give the Australian Commonwealth the definitive power to legislate the central landscapes of Canberra, resulting in a suite of regulations and guidelines, for example, the Right to Protest Guidelines (Australian Government National Capital Authority, 2003). By defining and restricting activities and access in the Parliamentary zone, these guidelines limit the democratic right of the nation's citizens to protest on federal land. In addition, the requirement to apply for approval to protest at least two days in advance deters spontaneity in democratic expression.

The mapping further revealed that Canberra offers few sites that are similar to the third landscape philosophy because it is built to support the public service with little industrial economy. However, in the middle of the twentieth century, the watershed system was converted into a series of stormwater channels that no longer function as ephemeral waterways. Inside these fluvial corridors, a pioneer ecology has established on the highly engineered riparian edge. As such, the marginalised channel systems were identified as appropriate typologies to investigate the contribution of the third landscape philosophy to the reconceptualisation of Canberra.

Sullivans Creek was selected as an appropriate testing ground for the design, based on three criteria. First, the watercourse runs through two jurisdictions. The creek itself is managed by the ACT Government (2013) and is not considered part of *National Land* (Australian Government National Capital Authority, 2003, p 2) until it reaches Lake Burley Griffin. These legislative boundaries provide a loophole that would allow protests to be held inside the creek independent of the Right to Protest Guidelines. Second, the creek flows through various cultural and



political landscapes including parkland, sporting fields, privately owned property and the Australian National University, allowing a broad engagement with Canberra's demographic. Third, the stormwater infrastructure is constructed entirely as a reinforced concrete channel that runs from northern Canberra to its confluence with Lake Burley Griffin. A Commonwealth Scientific and Industrial Research Organisation (CSIRO) report into Sullivans Creek nutrient load suggests this configuration provides a fertile ground for the retention and eventual germination of weeds (Dyer, 2000, p 12).

Furthermore, the creek itself can be understood as *another* landscape typology in central Canberra. A report into the heritage value of Lake Burley Griffin demonstrates that the creek was used historically by the Nganbra people for ceremonies and gatherings and is still considered as a valued Indigenous landscape in contemporary Canberra (Godden Mackay Logan Heritage Consultants, 2009, pp ii, 44). However, this perspective is overlooked by most of Canberra's post-colonial community, which identifies Lake Burley Griffin as the predominant cultural landscape; a perspective the traditional owners argue fails to acknowledge their submerged cultural sites (ibid, 2009, pp i, 54).

### *Triffid City: Design exploration of another urban landscape*

Based on the political and cultural expressions and challenges of both the aesthetics of and democratic rights to the city, the conceptual framework of the Triffid City was developed in relation to Sullivans Creek. In the Triffid City, the *other* in Canberra's urban construct is conceptualised through pioneer plant material. The title refers to John Wyndham's post-apocalyptic novel *Day of the Triffids* from 1954 in which Wyndham describes the ascent of a genetically engineered plant species that subsumes the anthropocentric dominion of the landscape.

In many aspects, the triffids act like the plant species identified in the national register of weeds of national significance (WoNS) (Thorp, 2012): they move, are illegal and challenge the cultural perception of landscape dynamics. Further parallels can be established between the novel and the design intervention, including the anthropocentric dichotomy of nature and culture. In the book, the protagonist Bill Masen demonstrates the role of humans in establishing the triffid-dominated landscape and he accepts the plants as a new ecological component of planetary dynamics, a framing designers have yet to fully engage with in Australian landscapes. Moreover, the global wind dispersal method of the triffids influenced the climatically driven Triffid City design intervention as a parameter that tests the role of landscape processes in reality.

In the instance of Canberra and the Triffid City design, the *other* is framed through the metaphor of the weed, specifically the 21 species included in the list of inaugural WoNS (Thorp, 2012). WoNS were selected for this project as the driver to explore how invasive floral species could spread across the landscape and challenge the cultural preconceptions of weeds in Australia.

Three sites were identified along Sullivans Creek with specific potential to help in the establishment and distribution of plant material (Figure 3).

**Site A** is located at the convergence of three separate stormwater channels, allowing for maximum floodwater inundation in storm events. This statement is backed by a CSIRO report that found up to 18 cubic metres of water per second



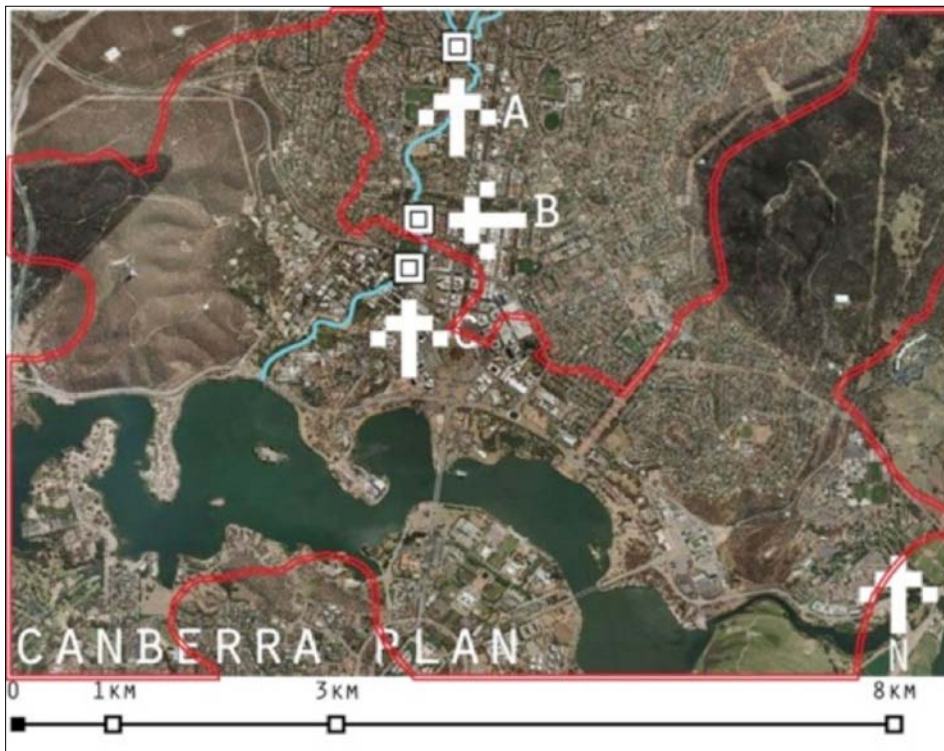


Figure 3: (2012) Triffid City spatial plan. The three sites (A, B and C) of the Triffid City intervention and their relationship to the Canberra landscape. Sullivan's Creek stormwater channel is indicated in blue and the legislative boundary of the National Capital Authority is indicated in red.

flow down Sullivan's Creek in large rain events (Dyer, 2000, p 50). Based on this information, it is hypothesised that a sudden influx of water will create sufficient force to destabilise established plants and push the debris downstream.

The embankment is regraded into an engineered garden characterised by a series of architectonic forms that inundate in heavy storm events (Figure 4a). As flood levels ease, water, sediment and plant material are captured in a variety of isolated deposition gardens. In stable conditions, the deposited plants are able to grow and establish themselves as permanent features of the design. However, extreme rainfall events for the ACT suggest the design will be disturbed frequently enough to push debris and disperse plants into the garden beds of sites B and C. Based on official meteorological rainfall data for 2013, this function would have already occurred 10 times as of September 2013 (Australian Government Bureau of Meteorology, 2014a).

Furthermore, the architectonic planes are designed in response to Canberra's prevailing north-westerly winds (Australian Government Bureau of Meteorology, 2014b), allowing wind-dispersed plant material (exterior to the site) to be captured. Certain WoNS, including cat's claw creeper (*Dolichandra unguis-cati*) and serrated tussock (*Nassella trichotoma*), disperse readily through wind movement (Osmond et al, 2008, pp 1–18; Weeds of National Significance, 2011) by being blown onto adjacent landscapes outside the boundaries of the creek; these species will spread uncontrollably through central Canberra independent of design.

**Site B** is located on a sweeping bend and passes through sports fields and recreational areas. Bends in water bodies, especially at times of high water flow, encourage fine silts and clay to settle on the adjacent bank (Vietz, 2012). Because Sullivan's Creek is predominantly a low velocity environment (ACT Government, 2011), Site B is attuned to a vertical accumulation of passing sediment as it heads towards Lake Burley Griffin (Vietz, 2012).

Figure 4b shows that Site B responds to this phenomenon by collecting the falling sediment, thereby creating fertile ground for the future establishment of WoNS. The form is characterised by a series of stepping systems, platforms and deposition beds that allow people to interact with the fluvial process of Sullivans Creek. Furthermore, the platforms and deposition beds demonstrate the cyclical nature of pioneer ecologies as they evolve over time and adjust to varying environmental conditions. Through the application of and interaction with the *other* at Site B, the design aims to present the concept of a dynamic third landscape to the city.

**Site C** was selected because it bridges the legislative boundary between federal and territory law. In regard to cultural and ecological perceptions of the *other*,

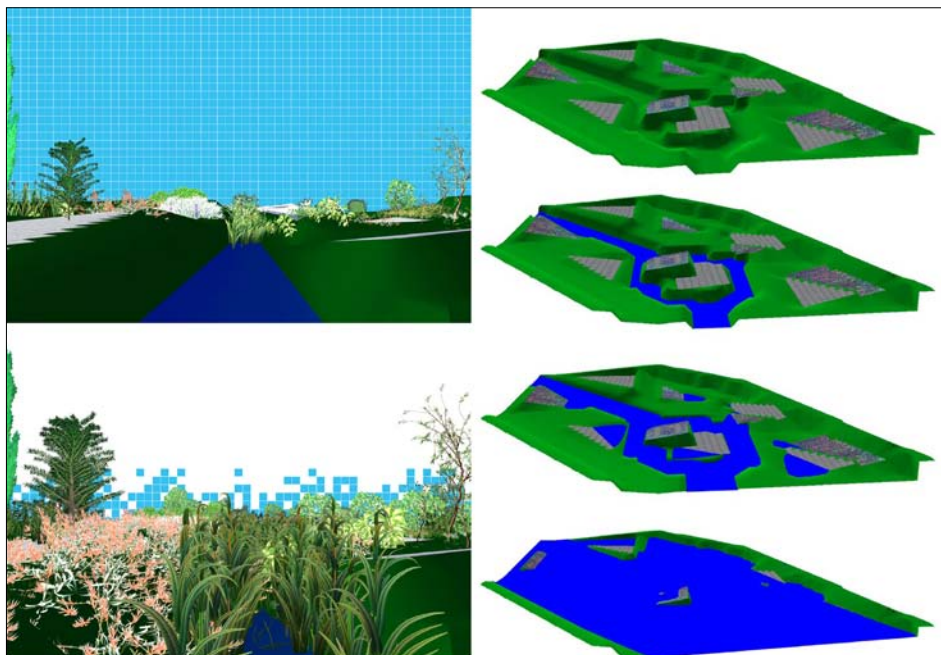


Figure 4a: (2012) Site A – perspective and exploded axonometric demonstrating the growth of pioneer plants (left) and architectonic folds responding to inundation (right).

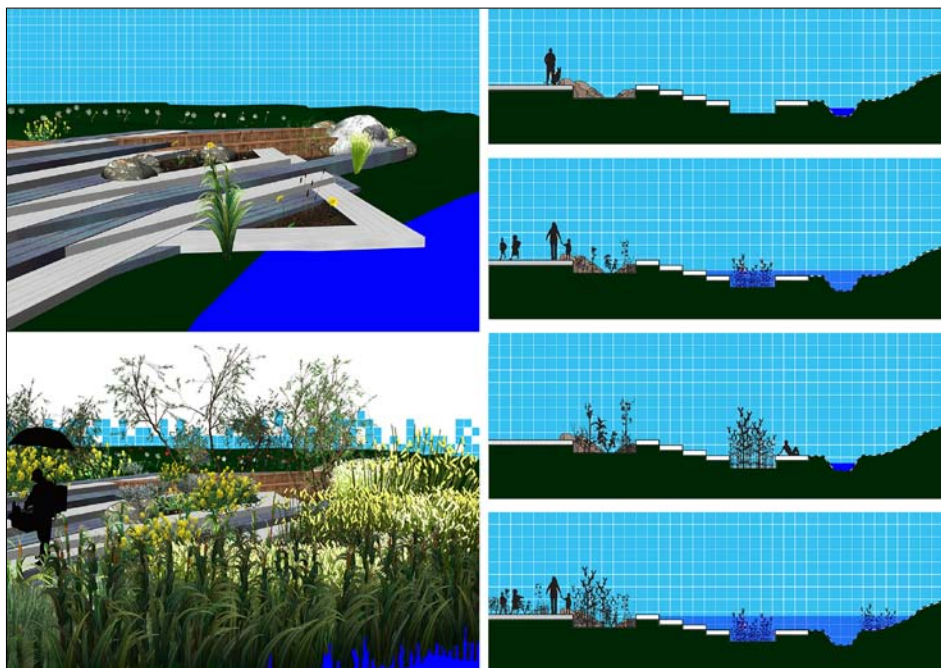


Figure 4b: (2012) Site B – perspective and section demonstrating the growth of weeds of national significance (left) and the inundation of the stepping system and occupation by people (right).



Site C is the most significant section of the design. On one side of this boundary, WoNS can be established independent of federal law; however, as they cross the invisible boundary, the weeds are redefined as illegal in the eyes of federal government. It is this classification that the intervention intends to rebuke.

The intervention here is an amalgamation of Site A’s regraded architectonic planes and Site B’s stepping systems and deposition beds, providing a heightened programme of sediment deposition and WoNS germination (Figure 4c). At the northern perimeter of the site, four deposition beds intersect the staircase, allowing the establishment of mature plant species that will continually produce seed stock. Moreover, the establishment of such species will protect against their removal in heavy storm events, encouraging the design’s continuous function in the future.

Throughout sites A, B and C, the original v-shaped funnel of the creek bed has been intersected with folded landforms, stepping systems and interlaced deposition beds. These design moves are considered as a highly exaggerated interpretation of stormwater channel characteristics, programmed specifically for capturing sediment, fresh water and eventual plant growth. These forms, combined with careful examination of Canberra’s historical rain events (Dyer, 2000, p 50; Australian Government Bureau of Meteorology, 2014a), Sullivans Creek flow history (ACT Government, 2011), prevailing wind patterns (Australian Government Bureau of Meteorology, 2014b), sediment deposition through fluvial process (Vietz, 2012) and major transport routes, suggest the design will sustain ongoing growth and transportation of WoNS across Canberra (Figure 5).

The design bypasses the strict guidelines on protesting in central Canberra and does so in three moves. The first involves spatial boundaries. As mentioned, Sullivans Creek is managed by the ACT Government and is not considered part of National Land (Figure 3), restricting the National Capital Authority’s ability to act upon the demonstration. Second, the Right to Protest Guidelines strictly prohibit any change to the landscape aesthetic through the application of a structure

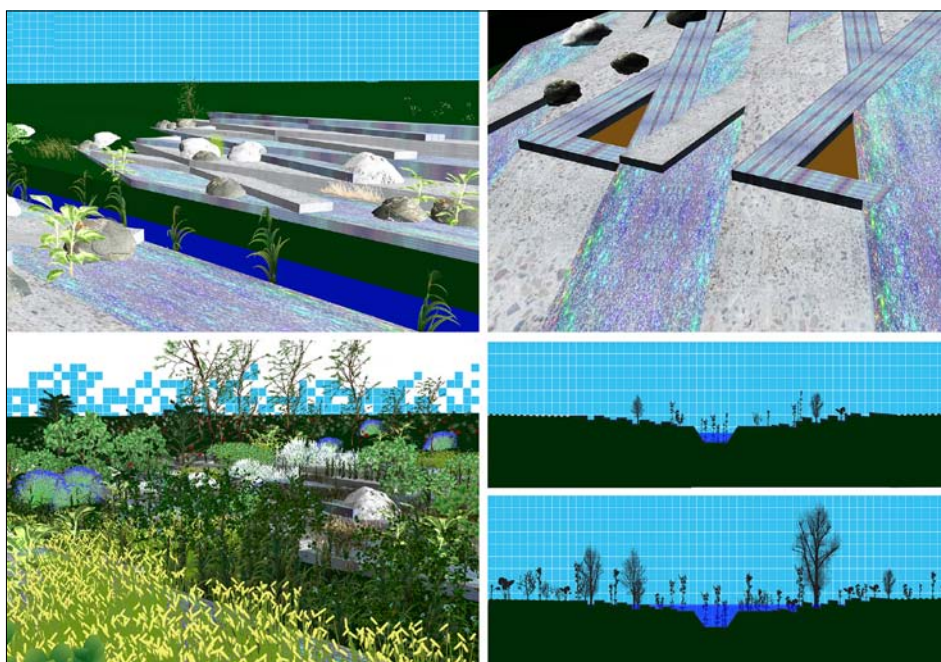


Figure 4c: (2012) Site C – perspectives and the section demonstrating the growth of pioneer plants (left), inundation of form (bottom right) and deposition gardens on the northern perimeter (top right).

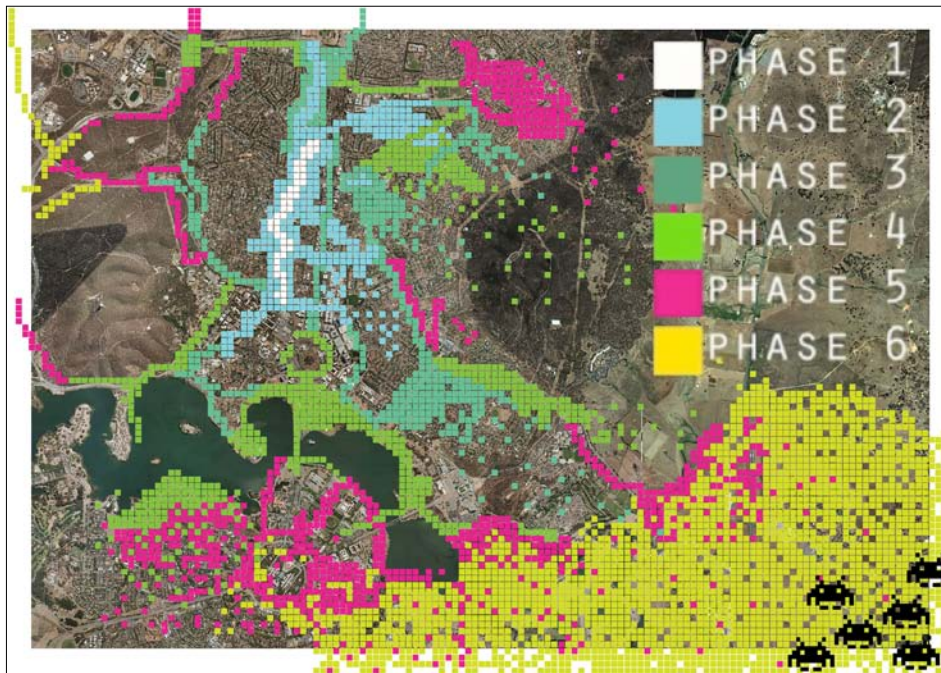


Figure 5: (2012) Triffid movement speculation, phases 1–6.

(Australian Government National Capital Authority, 2003, p 5) including staked vegetation. Plant material, however, cannot be considered as structurally solid because the establishment of species occurs outside National Land and depends on landscape processes rather than man-made and purposeful planting for survival. Finally, because the design is powered through landscape dynamics, a point of conclusion is difficult to discern, allowing the demonstration to continue for longer than the periods prescribed in the guidelines (Figure 6).

The Triffid design challenges the law through advocating the *other* and questions the fundamental position of these plants as invasive species in Australia. Demonstrating the benefits of WoNS as important components of the urban landscape may influence the negative socio-political perception applied to some flora in Australia. For example, it has been found that the WoNS common gorse (*Ulex europaeus*) has phytoremediation capabilities in sulfide-rich environments (Braga et al, 2013, p 2), a quality shared by the WoNS catclaw mimosa (*Mimosa pigra*) in nickel-contaminated landscapes (Handayanto, 2013, p 1). Moreover, the WoNS alligator weed (*Alternanthera philoxeroides*) can successfully remove contaminants from polluted waterways (Freitas & Prasad, 2003, p 9), a relevant issue in regard to the high levels of pollution found in Sullivans Creek (Dyer, 2000).

If these environmental benefits are realised, this may counter the cultural and scientific framing of WoNS in Australia. When expressed through a contemporary design language that challenges the community's perception of valued landscapes – in this instance, Lake Burley Griffin (Godden Mackay Logan Heritage Consultants, 2009, pp i–ii) – the performative aspect of the *other* is established as a valued urban landscape alongside its traditional counterpart. This inclusive programme would allow the *other* to become part of the political, cultural and ecological discussion at the national level.



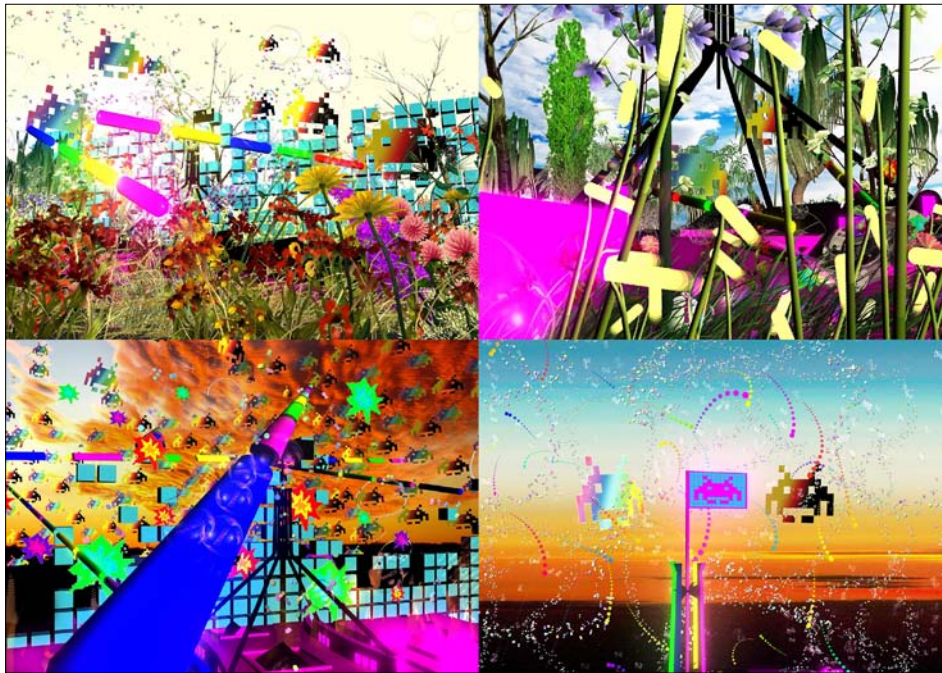


Figure 6: (2012) Conceptual renders – digital collage representing the ongoing protest by the Triffid community in Canberra.

### Discussion: The emergence of ‘Glitterosophy’ as an appreciative design approach

Elizabeth Meyer (2008) argues that design is a cultural act that merges civilisation with environmental processes. Landscape architecture as an expression of culture can develop a new aesthetic that deconstructs the ‘blanket’ approach to open space in the metropolis (McHarg, 1969). As outlined in the introduction, it is evident that contemporary landscape architecture in Australia so far lacks engagement with pioneer ecologies in urban projects either because of a conservative interpretation of naturalness in the design profession (Weller, 2006) or because of government policies and regulations.

International examples that engage with pioneer ecologies in an unprecedented way directly involve the generative components of landscape processes and start to formulate a new, contemporary design language in landscape architecture in the urban context. Examples of this approach can be seen not only in the work of Gilles Clément (for example, Derborence Island in the Garden Henri Matisse, Lille, 1991–1995) but also in works such as Park am Nordbahnhof (by Fugmann Janotta, Berlin, 2009), Schöneberger Südgelände (by Odious, Berlin, 2009) and Side Effect (by Amir Lotan, Bat Yam, Israel, 2010).

In the case of Park am Nordbahnhof, landscape architects Fugmann Janotta designed alongside the pioneer ecology that settled on the perimeter of the site. This remarkable move established a dynamic edge condition that has diminished the boundary between design and process. Similar design moves are present in Odious’s and Amir Lotan’s projects. Odious’s design for the Schöneberger Südgelände treats the pioneer ecology with sensitivity through minimal intervention. The circulation systems are elevated to limit disturbance of the ground plane and old industrial relics are left to erode through continual exposure to landscape and environmental processes. Lotan’s Side Effect works exclusively with ruderal plant species and other materials, including old car tyres and gleaned industrial paraphernalia, to introduce the aesthetic in the urban realm.

What allows these international precedents to operate at this level is a shared engagement with contemporary design theory that justifies a direct encounter with pioneer ecologies through urban design. It has been argued that this approach of linking theory and practice is paramount to testing the applicability of new concepts in real-world situations (Sepänmaa, 2010, p 397). The two case studies discussed in this paper combined the theoretical and practical perspectives through the exploration of the third landscape as a basis for design approaches for two Australian cities. What these explorations demonstrate is the necessity of design approaches that are open to alternative perceptions of aesthetics and that appreciate the potential of otherwise marginalised ecologies.

Through reflection on the case studies presented in this paper, Glitterosophy evolved as a possible term for framing design approaches that are positive and appreciative of the other. Glitterosophy is a portmanteau, the combination of the words 'glitter' and 'philosophy'. Glitter suggests a spectrum, a condition not confined to a definitive set of values, varying in response to evolving conditions and processes. Philosophy is 'the study of the theoretical basis of a particular branch of knowledge or experience' (Oxford Dictionary online, 2013), in this case, contemporary landscape theory. Glitterosophy, in the case of Fishermans Bend and Triffid City, suggests a landscape perspective in which the *other* is discussed as part of – and not in opposition to – the existing landscape aesthetics of Australian cities.

In reference to Fishermans Bend, the mapping technique revealed a disturbed landscape that was still functioning as an ephemeral wetland in times of heavy flooding. In this instance, the endemic wetland system has been replaced by light industry and the corresponding native vegetation deeply altered. However, various pioneer plant species have naturalised in the existing landscape, establishing a paradoxical relationship with native animal species. This discovery questions the assumptions made by science that invasive species are detrimental to endemic landscapes (Preston et al, 2006) and so should be forcefully removed.

In the case of Triffid City, the intervention expanded on the Fishermans Bend discovery and tested the *third landscape* theory through spatial intervention in Canberra. Although the design is defined as hypothetical, the rigorous study of Canberra's landscape dynamics suggests the intervention would facilitate the ongoing germination and transportation of WoNS across the urban landscape. Through the emergence of a dynamic aesthetic, Triffid City questions the hierarchical value of cultural landscapes in central Canberra and Australia. Why, for instance, is Lake Burley Griffin included on the National Heritage List (Godden Mackay Logan Heritage Consultants, 2009, pp i, 54) rather than the Indigenous ceremonial sites that were submerged through the lake's creation?

Further, the interventions question why pioneer plants are forcefully removed from Australian civic space instead of being applied through urban design. It may be argued that these decisions are based on ecological perspectives; however, considering only 5 percent of Australia's urban and rural ecosystems are unmodified or are not at risk from human intervention (State of the Environment Advisory Council, 1996), these methods seem misguided in the contemporary urban situation.

Lastly, the Triffid City project suggests that the incorporation of *otherness*, by programming space as a medium through which social and cultural perceptions can evolve, ensures a level of resilience that is currently missing in Australian urban design strategies. Civic landscapes should not be appreciated as static spatial artefacts; instead the interventions demonstrate that urban landscapes should have the inherent aptitude to respond to evolving notions of nature within the city. In this instance, the design aptitude has emerged through the concept of landscape aesthetics, specifically pioneer ecologies and their application in Canberra.

## Conclusion

Clément suggests that the *third landscape* is next in a lineage of environmental evolutions that should be applied through design for the betterment of our urban habitats (Clément in Borasi, 2006, p 92). Based on the case studies discussed, it is proposed that, if landscape architecture as a design practice was to engage with the concept of *third landscape*, the emerging projects could have the capability to change the public's perception of pioneer plants in Australian cities.

The role of the architect is to understand landscape dynamism, to articulate this through design and promote its continual function in urban settings (Clément in Borasi, 2006, pp 88–89). This perspective is shared by contemporary environmental aestheticians (Berleant, 2005; Carlson, 2010; Saito, 2007) and can be successfully demonstrated through design that uses pioneer plant species that often have a high degree of environmental adaptability (Dunnet & Hitchmough, 2004). If design practice taps into these abilities, urban space in Australia may develop better resilience to any variable climates in the future.

The Melbourne and Canberra projects discussed in this paper are a starting point for exploring alternative approaches on how design might engage with the concept of the *third landscape* and what the potential of remnant vegetation could be for Australia's contemporary urban environments. In the Fishermans Bend project, if the presence of interstitial ecologies in the built form is acknowledged then this could lead to a counterbalancing of the increasingly homogenised urban landscape in future urban renewal projects. The Triffid City design for Sullivans Creek in Canberra demonstrated an alternative strategy to address issues of political power and otherness as well as dynamic landscape processes. Shifting the design perspective to appreciate the *other* provides a foundation from which a progressive landscape aesthetic can evolve that supports diversity over homogeneity in Australian cities.

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# Reconciling History: Inserting an Indigenous Space into the University of Melbourne Campus

FIONA JOHNSON AND JILLIAN WALLISS

After decades of inaction, reconciliation has entered the Australian political arena. All Australian universities are now required to respond to government strategies to promote internal and external engagement with Indigenous communities. Strategies span the practical and symbolic, including constructing Indigenous centres, increasing Indigenous student and academic presence and acknowledging traditional owners within institutional ceremonies.

This paper focuses on a multi-disciplinary design studio that challenged students to insert an Indigenous space into the campus of the University of Melbourne, one of Australia's earliest universities. It highlights the value of creative mapping practice in disrupting the physical and institutional history of the campus, which is striking in its erasure of an Indigenous presence.

While these mappings proved useful for re-imagining the campus as a place of co-existence, students had major difficulties in conceptualising a future space of reconciliation. Dominant design strategies relied on abstraction and representing Indigenous culture through either symbolism or a political lens informed by post-colonial theory. Neither approach satisfies the ambitions represented by reconciliation, which aims to develop relationships between Indigenous and non-Indigenous Australians.

Students displayed a reluctance to explore questions of contemporary culture through design practice. This outcome suggests the necessity of two shifts in design education: first, the embedding of an increased understanding of Indigenous culture within design education and, second, the heightening of design techniques and design theory for engaging with contemporary culture, informed by allied disciplines such as architecture, museology and cultural studies.

In settler contexts throughout the world, issues of sovereignty and reconciliation are politically and culturally complex. Canada, New Zealand and South Africa have all been challenged with addressing the injustices of colonisation. Responding to the ambitions of reconciliation is particularly challenging in Australia. The Indigenous people of Australia have occupied the continent and its islands for at least 40,000 years. By comparison, British occupation of the land has been relatively short, beginning in 1770. Within this context, the notion of reconciliation is problematised by Australia's unenviable distinction as the only settler society not to have signed a treaty between colonisers and Indigenous landowners. Instead, the doctrine of *terra nullius* (land belonging to no one) was applied in 1835, which ignored Aboriginal people's sovereign right to ownership of land.

The history of race relations within Australia has been particularly harsh. For example, social policy, such as the Victorian Aborigines Protection Act 1886, fractured Indigenous families through the sanctioned removal of Aboriginal children from their families (referred to as the Stolen Generations). This practice

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## KEY WORDS

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Contemporary indigenous culture  
Spatial history  
Landscape architecture  
Design research  
Design education  
Creative mapping*

## REFLECTION



continued until the 1970s. It was not until the 1967 Constitutional Referendum that Indigenous people were included in the census as citizens. Before this, Aboriginal people were governed under the Flora and Fauna Act, under which they were perceived by the Federal Government as legally equivalent to wildlife. They were excluded from laws that applied to all other Australian people. The referendum granted the Federal Government specific powers to make laws regarding Indigenous affairs, opening the door for Aboriginal involvement.<sup>1</sup>

Efforts towards change emerged more prominently in the 1970s through the Land Rights movement, of which the Aboriginal Tent Embassy (1972) in Canberra is emblematic.<sup>2</sup> Legislative change has continued to be slow, with the Racial Discrimination Act passed in 1975, the Aboriginal Land Rights (Northern Territory) Act in 1976, the Aboriginal Land Rights Act (New South Wales) in 1983 and the landmark Mabo High Court decision to dissolve *terra nullius* in 1992.<sup>3</sup> The notion of a treaty came on the national agenda in the 1980s, following the presentation of the Barunga Statement in the bicentenary year of 1988.<sup>4</sup> Then Prime Minister Bob Hawke promised to develop a treaty by 1990 but this did not eventuate. Australia continues to be shaped by this tension given that 'settler state sovereignty was not legitimately established and Aboriginal sovereignty was, and continues to be, illegitimately ignored' (Short, 2012, p 300).

Despite the absence of a treaty, government has been intent on entering a process of reconciliation. The Royal Commission into Aboriginal Deaths in Custody (1987–91) is generally considered as the beginning of a formal reconciliation process. Outcomes from the Royal Commission led to the establishment of the Council for Aboriginal Reconciliation (1991–2000) and, later, Reconciliation Australia (2001 – present).

In 2008, then Prime Minister Kevin Rudd, on behalf of the Federal Government, made a formal apology to the Stolen Generations. This is considered a major symbolic step within the process of reconciliation, acknowledging the detrimental policies that had been administered by previous Australian governments, and an important step in the healing process.

The previous year, the Federal Government had launched the Reconciliation Action Plan (RAP) programme. RAPs are business plans that publicly formalise an organisation's commitment to reconciliation by identifying clear and realistic actions, facilitated by Reconciliation Australia. They emphasise generating relationships of respect between Aboriginal and Torres Strait Islander peoples and non-Indigenous Australians. According to Reconciliation Australia (2012a, p 1), the RAPs aim at 'embedding cultural change within a whole organisation through building good relationships, respecting the special contribution of Aboriginal and Torres Strait Islander peoples, and creating meaningful opportunities'.

Central to reconciliation is an emphasis on generating discussion within contemporary life, as distinct from the memorialising or recording of history. Given Aboriginal people are a marginalised minority in Australia (less than 2.5 of the total population of Australia according to 2011 census data (Australian Bureau of Statistics, 2012)), the reconciliation process 'remains dependent on the mobilization of support of a wider non-Indigenous public' (Short 2012, p 200). Consequently, the mission of Reconciliation Australia is to foster positive relationships – that is: 'To promote and build reconciliation between Indigenous and non-Indigenous Australians' (Huggins, 2005, p 9). Reconciliation Australia

(2012b) defines reconciliation as a process that is 'everyone's business'. The organisation states that:

Reconciliation is about building better relationships between Aboriginal and Torres Strait Islander peoples and the wider Australian community for the benefit of all Australians.

Designers are implicated within the process and policy implementation of RAPs, either in response to an institutional plan, such as a university RAP, or from within their professional organisations. For example, in September 2010, the Victorian Chapter of the Australian Institute of Architects launched its RAP, detailing steps and priorities to help achieve Indigenous equality (Australian Institute of Architects, 2010).

How designers respond to this desire for reconciliation is, however, uncharted territory. Few designers have experience working with Indigenous communities, let alone the more ambitious aims of reconciliation. The majority of design work has been completed within remote and regional communities, such as the Brambuk Living Cultural Centre (1990) at Halls Gap in Victoria, Uluru-Kata Tjuta Cultural Centre (1995) at Uluru Kata-Tjuta National Park in the Northern Territory, Big Wiltja Project (1996) at the Walungurru Community, Kintore, in the Northern Territory, Piylarli Yardi Gascoyne Aboriginal Heritage and Cultural Centre (2005) at Canarvon in Western Australia and the Wangka Maya Cultural and Language Centre (2008) at Wangka Maya, South Hedland, in Western Australia.

To date, few precedents from within Australian landscape architecture and urban design explicitly address the aims of reconciliation. For example, the winning entry for a design competition for Reconciliation Place in Canberra (2001) produced a representation of history rather than a space of reconciliation. The first designs to emerge from within landscape architecture that specifically address the demands of reconciliation, such as Victoria Square/Tarndanyangga in Adelaide, have yet to reach the stage of construction.

For designers, the challenge, however, is not limited to the techniques and opportunities of design to respond to reconciliation or to engage with a community. The issue is compounded by the virtual absence of Indigenous people within Australian cities. Their absence is particularly marked in Melbourne, where Indigenous people comprise only 0.45 percent of the total population of the greater metropolitan city (18,024 Aboriginal and Torres Strait Islander peoples). This compares with Sydney, where Indigenous people make up 1.25 percent (54,746) of the population, Brisbane 2 percent (41,904) and Darwin 9.2 percent (11,101) (Australian Bureau of Statistics, 2012). As suggested by McGaw et al: 'A lack of built fabric and general invisibility of Indigenous culture perpetuate the historical dispossession of Indigenous people in contemporary social practice and its architectural and institutional forms' (2011, p 300). This situation differs dramatically, for example, from the New Zealand context where Māori and Pacific cultures are strongly represented within spaces, architecture, festivals, language and everyday life.

It was against this context that students in the multi-disciplinary design studio were asked to insert an Indigenous space within the contemporary University of Melbourne campus. This proved to be a challenging proposition. Students began with an interrogation of the university's history, in search of an Indigenous presence.

## A textual history of erasure

The University of Melbourne, located in Melbourne, Victoria, is the second-oldest university in Australia, dating back to 1855. The main university campus is located in the inner suburb of Parkville, north of the city's central business district (see Figure 1). The university is highly regarded internationally for its teaching and research.<sup>5</sup>

The most widely circulated history of the University of Melbourne is provided on the 'About Us' page of its website (University of Melbourne, 2003a).<sup>6</sup> The only evidence of Aboriginality is found under 'Indigenous Apology'. The apology to the Stolen Generations locates the university spatially within the territory of the Kulin Nation. This is an alliance of five central Victorian Indigenous language groups, including the traditional owners and pre-colonial occupants of the Parkville campus area, the Wurundjeri people. This acknowledgement is significant, given that recognition of Indigenous people is generally lacking elsewhere throughout the university's written history. Two contrasting historical narratives are therefore presented: the history offered by the apology, which suggests an Indigenous narrative relevant to the university site, and a history of the university, which erases any acknowledgement of the traditional landowners. This division raises the question as to who actually constitutes *us* in the university's notion of 'About Us'.

The university's dominant narrative refers exclusively to the site post-foundation (University of Melbourne, 2003b).<sup>7</sup> The university is placed in a colonial chronology, constructed 'less than 20 years' from the arrival of the first European pioneers and the boom of the gold rush (University of Melbourne, 2003b). No reference is made to a prehistory of the land on which the university is built. Instead, the university's origin is intertwined with the establishment of the colony, 'a conscious move by the raw and young community to cloak itself with some of the sophistication of the parent country' (University of Melbourne, 2003b). The history continues as a celebration of important developmental



Figure 1: Map of the University of Melbourne Parkville campus within the city of Melbourne (Fiona Johnson).

moments, such as the laying of the foundation stone, and the many shifts in education that have followed. The short narrative ends suggesting that the early colonial aims of moral and intellectual improvement have become a reality, as 'the University of Melbourne maintains its pre-eminent position among Australian universities and is increasingly international in its outlook and its reputation' (University of Melbourne, 2003b).

This narrative mode aligns the construction of the University of Melbourne with the development of Australia as a modern space. While common in Australia's historical discourse, this framing is highly problematic for incorporating Indigenous people within the nation and its history. This position, states Chris Healy, 'ignores the simple fact that being fully in the time and space of Australia could only be conceived in relation to the place and time of indigenous people in Australia' (2008, p 49).

The published histories of the university campus replicate this grand narrative of colonial progress. This is clearly evident in Philip Goad and George Tibbits's book, *Architecture on Campus: A Guide to the University of Melbourne and its Colleges*, published in 2003. Emerging from celebrations marking the university's 150th year, the book catalogues the university's history through its architecture, moving through a chronology from 1853 to the time of the book's publication. With a focus on the evolution of the physical space of the campus, one could also expect discussion on the physical environment and the traditional landowners before the university's foundation.

While Goad and Tibbits (2003, p vii) do make reference to the site before foundation, it is described as 'largely unencumbered'. Goad and Tibbits describe the pre-foundation landscape as 'an open site, a swampy part of which had probably been a food-gathering area for the local Wurundjeri people' (2003, p 1). The use of the qualifying adverb *probably* reflects a hesitancy in making clear statements in relation to the specific emplacement of Aboriginal people in Australia's urban spaces, particularly when the evidence of such occupation is difficult to discern. The significance of the wetland system that once flowed through the campus to the history and culture of the local Wurundjeri people is unquestionable (Presland, 2008, p 20). However, this hesitancy seems to reflect people's inability to comprehend the physical landscape as cultural evidence from which to interpret history.

If the conceptualisation of colonial history shifted from a focus on progress and events to, instead, an environmental history that emphasises responses to and inhabitation of the environment, Goad and Tibbits could more confidently and accurately discuss a pre-European history of the site. As Gary Presland contends, by 'understanding where stream courses formerly flowed, we are better informed about where people set up camps and the routes that they travelled in their movement about the country' (2008, p 205).

This ambiguity about any preoccupation of the site continues in Goad and Tibbits's narrative. They state (2003, p 1) that:

After being fenced to exclude outsiders, the area became a picturesque landscaped park into which more and more individual buildings were added, with uncoordinated crowding the inevitable outcome.



Who exactly were these outsiders? Were they the *probable* food gatherers who were presumably fenced out, becoming excluded outsiders both physically and discursively from the university's modern landscape? Or were they convicts, bushrangers or other such marginalised subjects of the colony? The acceptance of such an ambiguous site history is surprising, especially given these events occurred only a little over 150 years ago. Goad and Tibbits do not seem to have attempted to augment the site history by consulting directly with Indigenous people, accessing oral history resources or through interpreting the physical environment.

George Tibbits's occasional paper, *The Quadrangle: The First Building at the University of Melbourne*, published in 2005, offers a further contribution to the university's heritage narrative (Figure 2). This account also fails to acknowledge the site's prehistory as both a physical environment and a home-land, although there is an allusion to a wetland system. This reference, however, is not to the wetland as an ecological system or natural landscape but as the transformed and colonised space of the picturesque lake. This constructed water body is framed as a hindrance to progress, existing 'not as the physical entities they once were, but as negative forces, inhibitors to development' (Tibbits, 2005, p 97).

This review of the university's discursive history reveals the narrow focus of academics and heritage professionals in conceiving urban history. These accounts of the campus heritage, which minimise any preoccupation or physicality of the site, are implicated in the collective amnesia of the settler society. The absences are surprising, given that these are contemporary accounts of history, produced during a period when issues of native title and reconciliation have been at the forefront of public and academic discourses. This amnesia reveals the paradox inherent in post-settlement perceptions of Australian urban heritage. That is, as Chris Healy articulates, in the city, 'Aborigines are imagined as absent in the face of a continuing and actual indigenous historical presence' (2008, p 49).

In light of this absence, students were challenged to insert an Indigenous space into the campus. Creative mapping techniques formed the starting point for offering new histories of the campus that, unlike the textual accounts, recast it as a site of co-existence.

### Revealing Indigenous narratives

Creative mapping techniques are of course not new, having informed the processes and techniques of landscape architecture since the 1990s. In Australia, however, these techniques are particularly useful in resurfacing an Indigenous presence after tangible evidence of it has been so comprehensively and rapidly erased from the built environment. Significantly, the composite nature of the maps allows students to conceptualise history as a space of co-existence, circumventing the amnesia of the University of Melbourne campus. History is now spatialised, and this space is shared. These maps became a scaffold for layering other multi-modal research techniques implicit in design.

The two maps generated by Master of Landscape Architecture student Jacqui Monie (shown in figures 3 and 4), for example, offer new readings of the university site positioned within a broader physical and cultural environment. The first map locates the campus site as part of a grassy woodland plain positioned on a high point between three water bodies. This map is constructed from text and symbols



*Figure 2: Photo of the Old Quadrangle at the University of Melbourne (Fiona Johnson).*

taken directly from original maps and offers an understanding of how the landscape was perceived by colonial settlers. An Indigenous presence is limited to the recognition of Burial Hill and the presence of the Yarra Mission further along the Yarra River.

Figure 4 offers a closer investigation of the campus site. The inclusion of contour lines over the early campus plan reveals that the quadrangle was constructed on a prominent ridgeline, adjacent to a major creek, which linked into the swampy area. This mapping also highlights the extreme spatial division of the campus, with the northern edge given over to the non-secular colleges and the subsequent campus development crowded into the southern edge of the site.

While some historians might argue that these maps lack the accuracy and rigour of textual histories, their strength lies in their ability to simultaneously engage with multiple sources of history and uncover new stories, narratives and relationships. The spatialisation of history immediately creates a space of co-existence, addressing Byrne's concern that historians traditionally compose 'a version of the Australian historical landscape, which is a fictional space where races do not interrelate, a space where Aborigines do not even exist' (2003, p 81). Byrne (2003, p 74) argues that the invisibility of Aboriginal people has been affected in two ways: through physical marginalisation and through discursive erasure. He maintains that heritage professionals have been complicit in this discursive process, 'by constructing a heritage landscape in which traces of the post-1788 experience of Aboriginal people were rendered invisible' (Byrne, 2003, p 74).

These representations remind us that history is enacted upon the same space and they encourage us to understand that meaning can be layered. The power of this framing is evident in student explorations of the swampy area of the campus. Although the site was described by Goad and Tibbits as a possible food-gathering area and also an 'inhibitor to development' (2003, p 97), further interrogation through mapping, heightened by archival research, reveals a far more complex history.



Figure 3: Plains grassy woodland, 2010 (Jacqui Monie).

Fiona Johnson's maps, as shown in figures 5 and 6, document the multiple events that have occurred on the swamp site, including: the Crown Surveyor Hodgkinson extending the boundary of the university to encompass two good trees and swamp (1854); transformation of the swamp into a lake (1861); Socialist student Guido Baracchi having been reprimanded for criticising Australia's involvement in World War I, with 200 students forcing him to stand in the lake up to his boot tops (1917); students re-enacting the first contact on the lake with Captain Cook, King Billy and a treaty (1938); and the final erasure of the lake (1939).

The site today forms part of the Union Court, the *concrete lawn*, which was designed post-May '68 as a riot-proof university campus. Yet hidden beneath this courtyard is a site that has significance for both Indigenous and non-Indigenous people. Further, the exclusion of the histories and stories of events that unfolded in this space from the campus tour and official history of the built environment fails to acknowledge the university as a place of debate and student life.

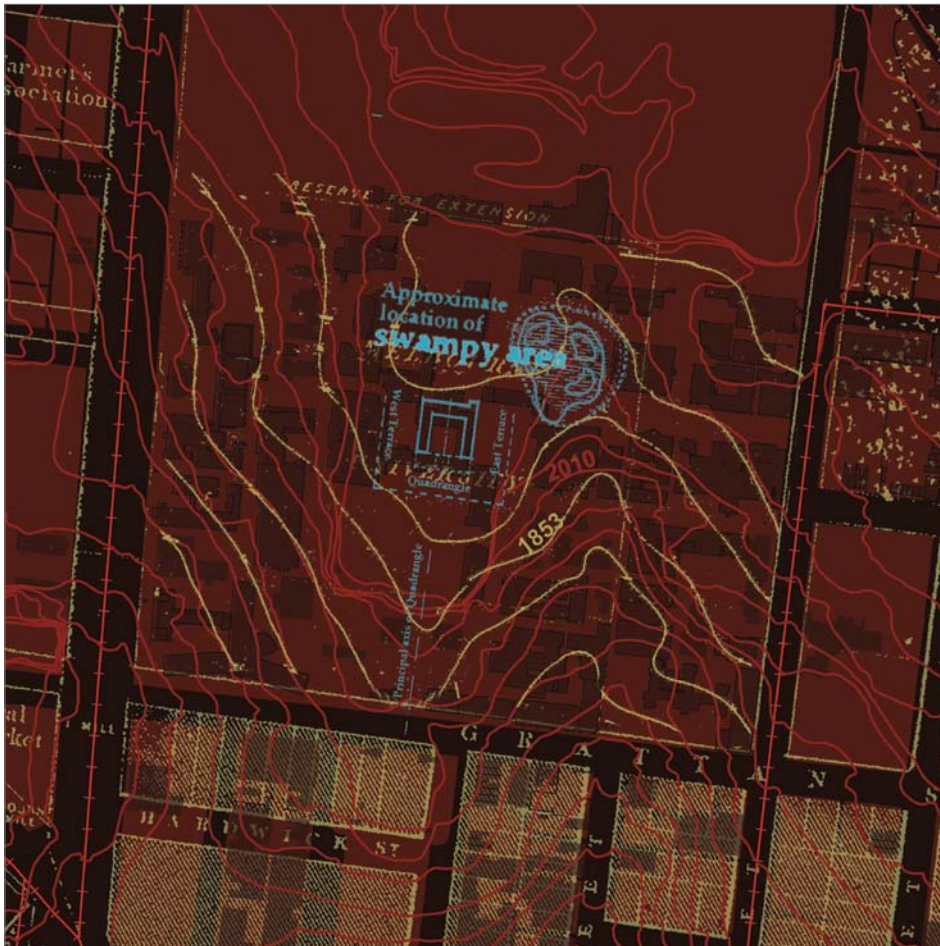
The richness and complexity of the *concrete lawn* attracted many students to its potential as a site of intervention. The next phase of design exploration proved extremely challenging. While these mappings were useful for re-imagining the history of the campus, students had major difficulty in conceptualising a future space of reconciliation. Design strategies relied predominantly on abstraction, with few engaging directly in imagining a new cultural space aligned with the intent of reconciliation.

### Strategies of abstraction

Understanding the complexities of Indigenous culture and the political agendas of Australia was extremely difficult for the international students, who were predominantly from mainland China. This is not surprising, given the low presence of Indigenous people in Melbourne, which is, for many students, their only experience of Australia. Their research into Indigenous Australia inevitably attracted them to art, especially of the more remote desert communities. The



Figure 4: Swampy area, 2010  
(Jacqui Monie).



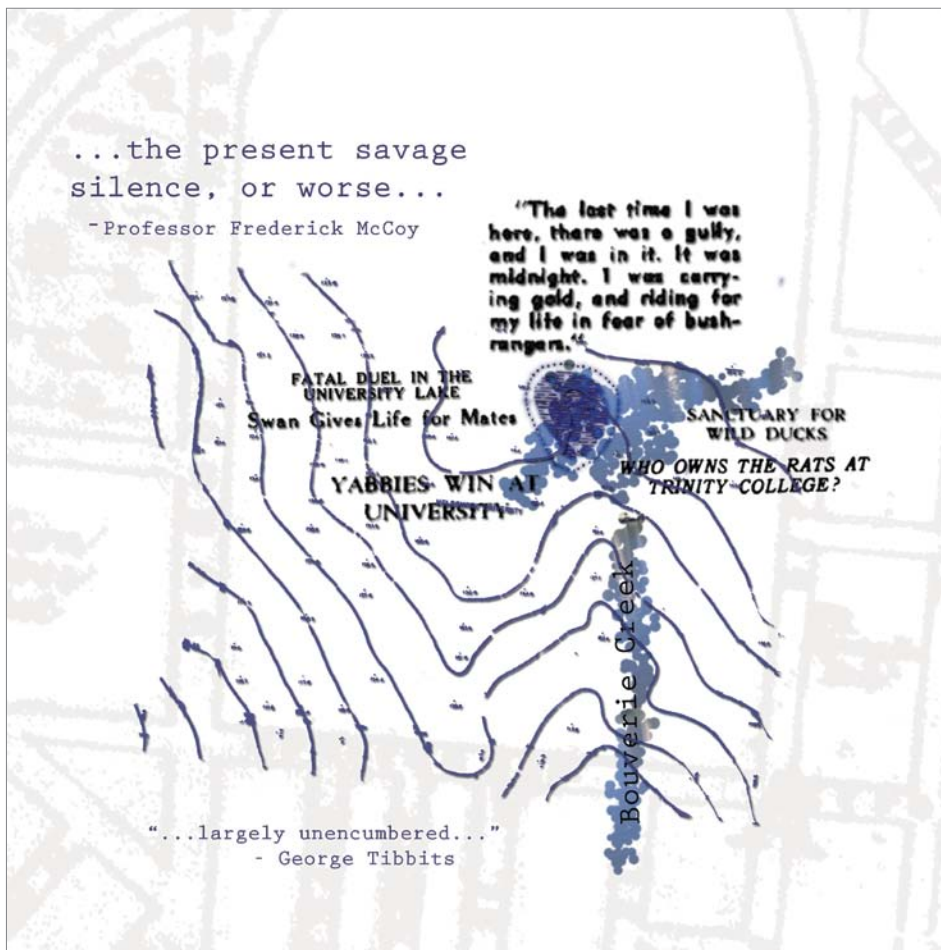
representation of Indigenous culture through forms, colours and symbols informed these students' initial gestures. As many scholars remind us, however, non-Indigenous people tend to read these cultural representations mainly at an aesthetic level, missing their significance as cultural knowledge. Dianne Lancashire (1999, p 318), for example, in her study of Kakadu National Park, claims representations of Aboriginality often 'provoke an aesthetic response, whether the representations take the form of paintings, dances and dramatic plays or "informative" brochures, national parks and cultural centres'.

Adopting cultural symbols is problematic at two levels: the first question concerns cultural appropriation and whether the designer has the right to use these symbols and the second is about the reduction of these complex representations of knowledge and culture to patterns and symbols. Further, the insertion of this symbolism within the University of Melbourne campus inevitably positions Indigenous culture within the problematic binaries of formal/organic, built/unbuilt and progress/historical. This awkward juxtaposition was demonstrated in Shaolin Ji's project, which proposed an alternative entrance into the campus that terminated at the building currently housing Murrup Barak (the Melbourne Institute for Indigenous Development).

This new avenue (shown in Figure 7) contrasted with the historic axis that aligned with the southern lawn and terminated in the Tudor Gothic old quad. Initially, Shaolin was drawn to literal interpretations of Aboriginal art but was encouraged to shift her response to a more topographic exploration. These new



Figure 5: *Largely unencumbered*, 2010  
(Fiona Johnson).

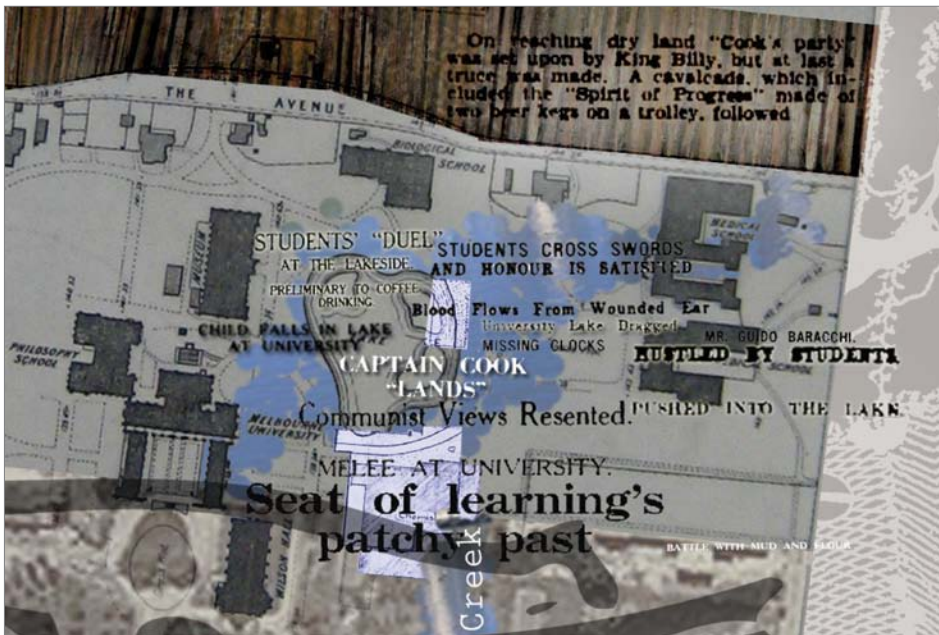


landforms unsettled the dominance of the imposing architecture that defined the former *concrete lawn* and gave new prominence to the ground plane and smaller Murrup Barak building.

With more awareness of the complexity of cultural appropriation, the Australian students favoured a post-colonial lens for conceiving an Indigenous space. However, the manner in which they applied this theory also resulted in abstraction. Students set out to disrupt the colonial power structures evident within the architecture, spaces, symbolism and hierarchy of the campus. These design responses, though, continued to avoid direct engagement with contemporary Indigenous culture and concepts. Instead, Indigenous culture was assumed into an intellectual critique of hierarchy and power, which deflected from the goal of reconciliation between Indigenous and non-Indigenous Australians. Theory replaced cultural knowledge and local communities.

Daniel Morton's scheme, for example, explored the notion of a post-colonial university campus, with an emphasis on the use of vegetation. His scheme unfolded as an exposé about the control and formalisation of space and planting. While interesting, the focus shifted from an engagement with Indigenous culture to the ambition to 'track a new course of design that has an ability to meaningfully engage with our colonial legacy'. A focus on Indigenous plants was deemed to be the link to Indigenous culture. Fiona Johnson's exploration of democratic space also side-stepped a direct engagement with Indigenous culture. Her scheme replaced the rigidity and control of the *concrete lawn* with an ephemeral shifting topography that could accommodate new spatial relationships and practices of protest.

Figure 6: Patchy past, 2010  
(Fiona Johnson).



Similar to the symbolic responses, many of these interpretations develop a problematic construction where an Indigenous presence or culture is conflated with nature or the landscape. Any sense of Indigenous Australians having an enduring and contemporary presence is absent in these constructions. This is an extremely fraught framing, revisiting a dominant colonial construction that relegates Aboriginal people to the status of nature, considering them to be as timeless and primitive as the landscape itself.

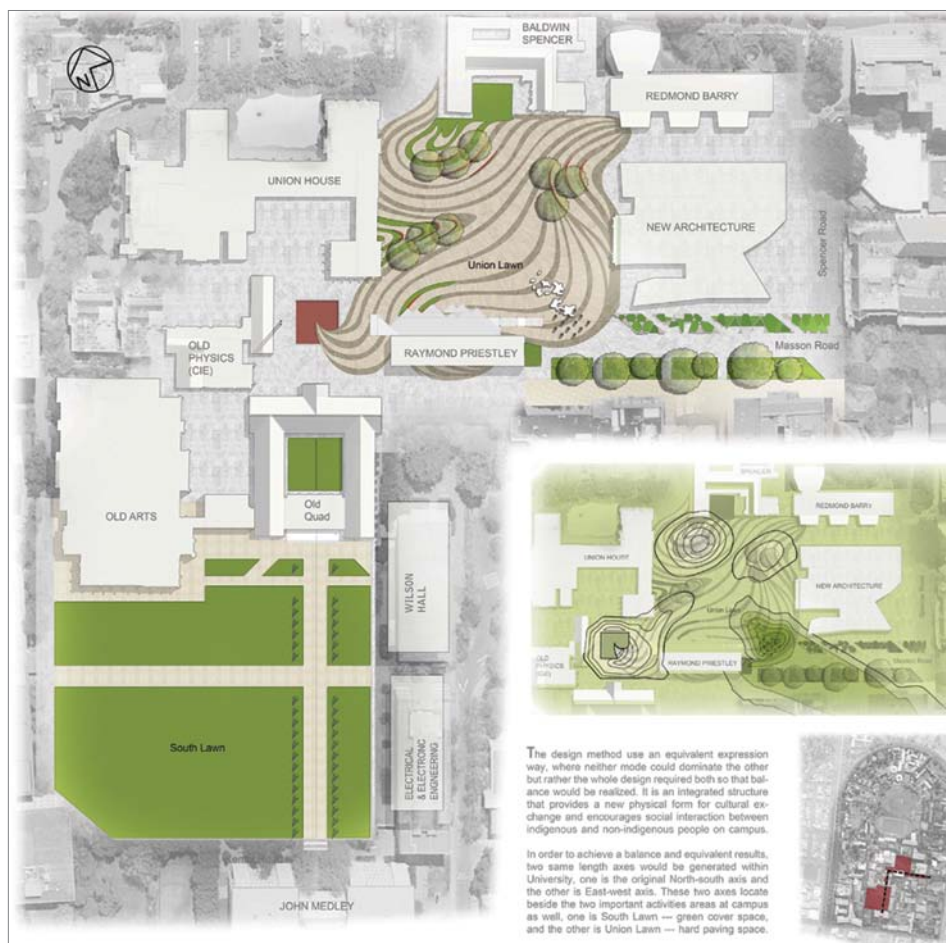
This reliance on strategies of abstraction can be traced to the students' weak knowledge of or lack of confidence with understanding Indigenous culture and history. However, we argue that it also suggests a reluctance to explore questions of contemporary culture through design practice and a hesitancy to engage with allied disciplines that do.

### Towards a space of reconciliation

The few students who could conceptualise new relationships between Indigenous and non-Indigenous Australians looked for inspiration and guidance from museology and architecture. These disciplines have far more experience in engaging with questions of cultural representation, politics and identity than landscape architecture. That experience has been heightened by the increase in the number of cultural centres (urban and remote) and new national and state museums constructed in Australia since the early 1990s. While these new cultural spaces have been shaped by a post-colonial lens, they aim to encourage a contemporary and enduring Indigenous presence rather than to memorialise culture. Consequently, their design strategies emphasise performative and programmatic aspects over abstraction.

Jacqui Monie's scheme, shown in figures 8 and 9, proposed a new flow of paths and surfaces that invited 'an evolving Aboriginal authorship of space through habitation, use and expression'. New pathways carved into the ground plan led to a subterranean space and outdoor courtyard that offered multiple canvasses for interactive art, adaptable architecture, new technologies and media.

Figure 7: Developing an alternative axis (Shaolin Ji).



The focus on new technologies challenges old notions of primitivism and, instead, emphasises a continually evolving and highly urbanised Aboriginal culture. The use of technology also facilitates connections beyond the site, provides for the writing of new futures and stories with a strengthened collective voice and can link to a broader audience.

Connecting the diverse and multiple layers of Indigenous culture also formed the basis for architecture student Sarah Delamore’s intervention for the student union building shown in figures 10 and 11. Growing up with the cultural hybridity that distinguishes bicultural New Zealand, Sarah found the absence of an Indigenous presence in Melbourne particularly challenging. Through a re-imagined hub of campus activity, she aimed to connect the isolated pockets of Indigenous presence found within the greater university precinct, such as the Melbourne Museum, Murrup Barak, visiting Indigenous academics and the Koori community of Carlton.

Her work was informed by the research and writing of Australian architect Shaneen Fantin (2003, p 86) who advocates for a focus on social practices, rather than the abstraction of Aboriginal semiotic devices into design, arguing for the development of ‘identity through occupation first, representation later’. This response shifts from presenting Aboriginal culture as an object to, instead, creating architecture based on daily events, activities, use and occupation. Sarah’s strategy involved realigning the architectural fabric to the true cardinal points of east and west (a reference to the tracking of the sun), which provided opportunities for





*Figure 8 (left): An undulating ramp leads under the Raymond Priestley building and down to Murrup Barak (Jacqui Monie).*

opening up the internal campus structure to surrounding spaces and light. New programmes supporting Indigenous culture were interwoven into the structure, incorporating natural materials, transitional spaces and external programmes.

Sarah's familiarity with culturally hybrid spaces in New Zealand helped her conceptualise a space of dialogue and interaction. Similarly, Jacqui Monie's experience as an exchange student at the University of British Columbia in Canada provided her with a valuable understanding of how Indigenous culture could be embedded within a university campus. For both students, the disciplines of museology and architecture provided valuable guidance for engaging with contemporary Indigenous culture.

This studio presented students with an immense challenge: to engage with a culture that, to many (including Australian students), was extremely foreign. At one level, it can be argued their reliance on design strategies that focused on



*Figure 9 (right): A cafe and kitchen opening onto a flexible space for public and private events (Jacqui Monie).*



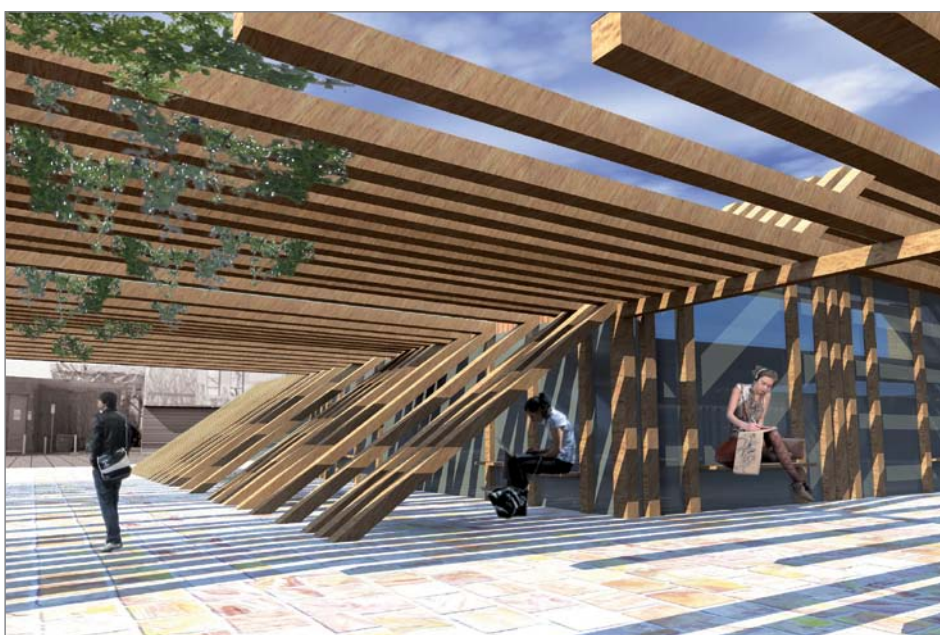


*Figure 10 (left): Interweaving new programmes into the existing student union building (Sarah Delamore).*

abstraction reflects the absence of an understanding of Indigenous culture within their education and also their everyday life. But we suggest that, even with an increased level of cultural understanding, many students would still struggle to explore questions of contemporary culture through design practice.

While students were comfortable in understanding and exploring the site as a physical and cultural space, their ability to project a future space of reconciliation was limited. We doubt this outcome is restricted to just these students but suggest many landscape architecture students are more comfortable within the realm of analysis than speculation.

Landscape architecture education has made significant inroads in developing more complex understandings of ecology, infrastructure and natural systems. Similarly, our conceptualisation of cultural landscape has shifted the manner



*Figure 11 (right): A new relationship between internal and external spaces (Sarah Delamore).*

in which heritage is understood. However, there is less evidence of an equally rigorous exploration of cultural production. This is extremely important in the context of Australia where engagement with Indigenous Australia within shared urban spaces is only just beginning.

## Conclusion

Reconciliation, understood as a process of constructing new relationships between Indigenous and non-Indigenous people, presents an important opportunity for contemporary Australian society. Designers will be increasingly asked to engage with the process, as policy materialises into design briefs for new civic and institutional spaces. Much of the urban fabric of Australian cities has erased the presence of Indigenous people. This paper has highlighted the potential for creative mapping techniques to reveal alternative institutional histories, narratives and stories. The identification of such sites and histories is critical to addressing the amnesia relating to Indigenous people and culture that continues to permeate perceptions and constructions of Australian urban heritage.

The new mappings and histories uncovered as part of the studio, for example, have been incorporated into a new walking tour for the campus. The 'Billibellary Walk' offers an understanding of how the Wurundjeri people continue to understand the land on which the university was constructed. The extraordinary history of the swamp, uncovered as part of the studio, will feature as one of the 11 points of interest.

This paper has also raised questions regarding the manner in which landscape architecture engages with culture and design. It highlights the importance of looking beyond landscape architecture to produce successful outcomes supportive of the goals of reconciliation. As this studio experience has demonstrated, allied disciplines – such as architecture, museology and performative practices – offer valuable guidance and support for a future generation of designers to meaningfully engage with not only the possibilities of reconciliation but culture in general.

## NOTES

- 1 For a detailed account of the politics of the referendum, refer to Attwood and Markus (2007).
- 2 Installed as an act of protest, the Aboriginal Tent Embassy is located in the forecourt of Old Parliament House in Australia's national capital Canberra. On the night of 25 January 1972, Indigenous activists from Redfern, Sydney, drove to Canberra and erected a beach umbrella in front of the then parliament. The embassy drew on public support for Indigenous land rights, provoked by a series of cases: the Gove land rights case (1971), the Gurindji people's industrial action 'Walk-off' at Wave Hill (1966–75) and a nationwide protest for land rights, Ningla-A-Na (meaning 'hungry for land' in the Arrernte language) which marched in several state capital cities on National Aborigines Day 1972. In 1995, the embassy was added to the Register of the National Estate. The Aboriginal Tent Embassy continues to be a central space for land rights and reconciliation, celebrating its 40th anniversary on 26 January 2012 with 'Corroboree for Sovereignty'. For more information, see Aboriginal Tent Embassy (no date) and Muldoon and Schaap (2012).
- 3 The Mabo High Court decision instigated the legal doctrine of native title into Australian law. In doing so, it overturned *terra nullius*. The action was led by Eddie Mabo, David Passi and James Rice, on behalf of the Meriam people from Murray Island in the Torres Strait. The Mabo decision was formally enacted into legislation by the Australian Parliament through the Native Title Act 1993. For details, see High

- Court of Australia (1992) *Mabo v Queensland (No 2)* ('Mabo case') [1992] HCA 23; (1992) 175 CLR 1 (3 June 1992).
- 4 The Barunga Statement, comprising two bark paintings and text calling for Indigenous rights, was presented to the then Prime Minister Bob Hawke at the 1988 Barunga Festival in the Northern Territory. This statement of national Aboriginal political objectives called for self-determination, a national system of land rights, compensation, respect for Aboriginal identity, the end to racial discrimination and the granting of full civil, economic, social and cultural rights. The full statement can be read on the archive for the Council of Aboriginal Reconciliation (2000).
  - 5 The University of Melbourne is ranked 34th in the world by the Times Higher Education 2013–14 rankings, 54th in the Academic Ranking of World Universities 2013 and No 1 in Australia according to both ranking agencies. See University of Melbourne (2012) Reputation and Rankings, Parkville, Victoria, The University of Melbourne. Accessed 26 June 2014, <http://futurestudents.unimelb.edu.au/explore/why-choose-melbourne/reputation-rankings>
  - 6 Authorised by the university's Director of Information Management, the content was created in 2003 and updated as recently as February 2011.
  - 7 The authorship of the page is unacknowledged but authorised by the Director of Information Management; this narrative is voiced by the official mouthpiece of the university.

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# Night Landscapes: A Challenge to World Heritage Protocols

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Starlight reserves are a relatively new concept whose definition and management protocols have come about in an era when understandings of human relationships with nature are dynamic and infused with cultural meaning. Rather than assuming that pristine nature can be sealed off from human influences, World Heritage guidelines now accept that our experience of nature may be enriched by attention to the multifunctional landscape, in which a blend of aesthetic, historical, cultural, scientific and environmental elements are carefully presented to tourists.

Observatories and clear night skies are ideal sites for such an interface, and the loss of dark skies has led to new systems of audit aimed at their preservation. This study of the potential for a World Heritage Site in the Mackenzie Basin, in the South Island of New Zealand, grounds the interaction between World Heritage goals and management of land use in a place where exceptional sky quality and competing land uses challenge multiple stakeholders to rethink their concepts of landscape.

Appreciation of landscape and outdoor activity forms the basis of tourism in the Mackenzie Basin (see Figure 1). Not only is the landscape important in its own right, but the golden tussock frames the first glimpse of Aoraki/Mount Cook for many of the over 300,000 visitors annually to the national park and Te Wāhipounamu World Heritage Site. While the Basin delights many travelling through the area, few are present at night. This number is increasing as a night landscape of stars complements the daytime 'big skies' of the Mackenzie Basin, which is well known for its sunsets, sunrises and cloud formations (Thompson, 2011, p 162). This paper investigates how World Heritage certification might help with management of the night sky in the Basin. The World Heritage certification process encourages a holistic assessment of the landscape and requires conservation values, cultural values and development needs of local people to be addressed.

## Current dark sky quality assurance schemes

International Dark-Sky Association (IDA) reserve certification has already been awarded to the Mackenzie Basin, one of four large areas designated internationally between 2008 and 2012 to have exceptional sky quality (International Dark-Sky Association, 2012).<sup>1</sup> The reserve's focal point is the Mount John observatory, which has required careful shielding from local lighting since the 1980s. While the three earlier reserves are either national parks or nature reserves, the Aoraki Mackenzie Dark Sky Reserve is a multifunctional area, partly conservation estate, partly Crown land and partly private land.

The IDA reserve status has encouraged visitors (Littlewood, 2013a) and will reinforce the importance of regulations that ensure local development must not

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## REFLECTION



Figure 1: Typical view of the Mackenzie Basin (Two Thumb Range) (Keith Payne).

impact on the sky, providing a focal point for consideration by those involved in the Basin's management. Multifunctional areas like the Basin, which engage national and regional interests, are complex to manage and prone to controversy. Dark sky reserves can, however, be managed to create less conflict than other terrestrial developments (Marín et al, 2010).

The Aoraki Mackenzie Dark Sky Reserve area is listed as a 'Window to the Universe', one of five identified by Cotte and Ruggles (2010) in the International Council on Monuments and Sites (ICOMOS) and International Astronomical Union (IAU) Thematic Study on astronomical heritage, a global study on the relevance of astronomy and archaeoastronomy to world heritage. The World Heritage Committee does not yet have specific references in its 2013 *Operational Guidelines for the Implementation of the World Heritage Convention* that support the designation of heritage sites on the basis of sky quality. However, addressing the under-representation of astronomical sites on the World Heritage List has been a project of the IAU and UNESCO World Heritage Centre since 2005 (Sidorenko-Dulom, 2007).

Securing World Heritage status for an area such as the Aoraki Mackenzie Dark Sky Reserve would require establishing that many aspects of the Basin have Outstanding Universal Value (OUV).<sup>2</sup> Specific elements in the management regime would need to preserve not only night sky quality in the areas allocated reserve status but also the conservation, aesthetic and cultural qualities across the whole Basin.<sup>3</sup> It may take several years to develop criteria within the Operational Guidelines specifically for night landscapes that would help with developing management plans for such areas.

Artificial lighting has become the defining influence on the night sky. Those in metropolitan areas see as few as six stars at night, and even those in peri-urban and agricultural areas find their relationship with the sky changing because of sky glow (Cotte and Ruggles, 2010). Moreover, whether lighting is perceived positively as a spectacle, signalling progress or providing safety, or less positively as a sign of excess energy consumption and a barrier to science and biodiversity, cultural framings also influence our understanding of lighting.

New Zealand has been engaged with World Heritage processes for decades. Current landscape management is influenced by such ‘meta’ management regimes, including their processes for governing cultural and associative landscapes (Stephenson, 2007).<sup>4</sup> However, the ongoing management of a World Heritage Site remains essential to the preparation of a successful proposal by the Department of Conservation (DOC) for inclusion on New Zealand’s tentative list.<sup>5</sup> At present, DOC prefers to wait for amendments to the *Operational Guidelines* that specify night landscape criteria before considering the addition of the Aoraki Mackenzie Dark Sky Reserve site to New Zealand’s tentative list (Abbari et al, 2011).

### World Heritage operational guidelines and a starlight reserve

It is anticipated that any amendment to the *Operational Guidelines* will be modelled on the starlight concept articulated in the *Declaration in Defence of the Night Sky and the Right to Starlight* (Marín & Jafari, 2007), which provides a conceptual framework for the development of starlight reserves. This conceptual framework is entwined with the ICOMOS–IAU thematic study on astronomical heritage, which identified astronomical sites that may embody OUV (Cotte and Ruggles, 2010). The University of Canterbury has facilitated attempts to establish a World Heritage sky-oriented site in New Zealand by extending the original Mackenzie Basin case study that featured in the *Thematic Study*, as well as exploring how a case might be mounted for a World Heritage listing, given the amount of ‘official’ documentation available on the subject.<sup>6</sup>

The *Operational Guidelines* are fundamental to understanding World Heritage certification processes because they articulate precise criteria for the inscription of properties on the World Heritage List. Therefore a brief explanation of relevant concepts from the *Operational Guidelines* and how they could be interpreted for the Mackenzie Basin dark sky site follows. Authenticity and integrity are core World Heritage concepts. To be considered as exemplifying OUV, proposed sites must meet strict conditions of authenticity and/or integrity (UNESCO World Heritage Centre, 2013, pp 21–24). Authenticity relates most closely to the cultural elements of a site. It is concerned predominately with the credibility of sources that help determine the site’s OUV, which must build a complete picture of the nature, specificities, meaning and history of the site’s cultural heritage. Notably, different elements of a site’s cultural heritage and authenticity of sources are evaluated within the cultural contexts to which they belong. For instance, past and present uses of the Mackenzie Basin site by Māori could be as important to the World Heritage application as the current scientific use of the observatory. Aoraki/Mount Cook’s spiritual significance to all Ngāi Tahu is expressed through the Tōpuni status of the mountain.<sup>7</sup>

The visual catchments and view shafts between the southern shores of the lakes and the mountains in the north were particularly important to Ngāi Tahu for the purpose of maintaining relationships with those places (Boffa Miskell Limited et al, 2008, p 33).

Indeed, the entire Mackenzie Basin is a significant ancestral landscape to Ngāi Tahu. Gaining and maintaining World Heritage status would require far more Māori involvement in the management of the Basin to establish the site’s authenticity.

Integrity is associated with the physical manifestations of a site's cultural and natural value. Primarily, it is concerned with the 'wholeness and intactness of the natural and/or cultural heritage and its attributes' (UNESCO World Heritage Centre, 2013, p 23). For cultural sites, the property and significant features that contribute to OUV must be well preserved. In the Mackenzie Basin site, the sky would deliver both the tangible and intangible aspects (eg, cultural relationships) and must be maintained to ensure the site's OUV for future generations. Additionally, for a nomination to the World Heritage List to be successful, the site must be large enough to be representative of each natural and cultural criterion it includes as contributing to its OUV so that development outside the site does not intrude on the experience within. For dark skies, the zone must be extensive.

Included in the Mackenzie Basin site's OUV are terrestrial natural criteria, which strengthen an application for inscription on the World Heritage List based on the night sky. The criteria are mainly met by the geomorphic significance of the Mackenzie Basin, as the largest intermontane basin in New Zealand. Many of the landforms present in the Basin are the result of late Pleistocene glacial advances and retreats that occurred 13,000 to 130,000 years ago and complement landforms within Te Wāhipounamu World Heritage Site (Department of Conservation, 1989).<sup>8</sup>

The inland alluvial surfaces, inland dune systems, kettleholes and braided rivers of the Mackenzie Basin are globally rare ecosystems. They provide important habitat for many rare and threatened native and endemic species of flora and fauna. The northern area of the Basin, covered by the Aoraki Mackenzie Dark Sky Reserve, has been identified as the area with the greatest potential for ecological conservation (Walker, 2010). Many creatures require night to be fully themselves, to hunt and avoid being hunted; even growth can respond to inbuilt circadian rhythms (Marín & Orlando, 2009, p 8). Further research is required on the relationship between the area's threatened species and light pollution, but nocturnal and diurnal species are present.

### Managing the night landscape in the Mackenzie Basin

With tourism now competing with farming for the status of being the major economic opportunity of the Basin, management of the landscape is becoming increasingly complex. A series of overlapping plans, produced by local, regional and central government bodies, is being challenged by rapid land-use change in the south of the Basin (Environment Court of New Zealand, 2011). The night sky is already protected in the north of the Mackenzie Basin in support of scientific activities at the University of Canterbury's Mount John Observatory (Mackenzie District Council, 2004).<sup>9</sup> The unique aesthetic qualities of the Basin and its tourism (over 1 million visitors pass through every year) have inspired innovative night sky tourism based in Tekapo (Earth and Sky) and Mount Cook Village (Big Sky Stargazing and the Sir Edmund Hillary Alpine Centre planetarium) plus small-scale guiding without access to powerful telescopes (see Figure 2). Fraser Gunn's astro-photography gives the night sky an international web presence.<sup>10</sup>

DOC management plans include dark skies among the values to be protected, but the Resource Management Act 1991 makes no mention of night sky quality.<sup>11</sup> The regional-level landscape plan mentions the sky as an important element





Figure 2: Astro-tourism at twilight, Mount John: Comet McNaught in 2007 (Fraser Gunn).

of the Basin (Environment Canterbury, 2010, p 142). Regional environmental reports have relevance to sky quality, and, as with the Mackenzie District Council, regional and national organisations interact with and consult tangata whenua, who value sky quality (Abbari, 2013).<sup>12</sup> Non-government agencies also help private landowners with the conservation of indigenous species and monitor the planning regime (Environment Canterbury, 2010). Landowners will continue to be bound by the Lighting Ordinances of the Mackenzie District Council, but further controls in all higher-level policies produced under the Resource Management Act would need to support night sky qualities explicitly before any part of the Mackenzie Basin could attain World Heritage status.

Many planning documents address the link between landscape and tourism. Tourism is understood as being double edged: it provides resources for conservation and education about environmental needs but also has the potential to degrade the environment as use of an area increases. Celestial tourism (which includes aurorae and other sky viewing from sunsets to eclipses) has minimal impact in fragile environments. Like other sustainable tourism initiatives, considerable thought is given to managing the impact of tourism numbers and activities and promoting the educational aspects of the night sky (Weaver, 2011).

### Starlight reserves and landscape controversy

The IDA Aoraki Mackenzie Dark Sky Reserve comprises two core zones at Mount John and Mount Cook airport and a protective zone, which extends the existing Outdoor Lighting Restriction Area in the Mackenzie District Plan 2004 to the boundaries of Te Wāhipounamu World Heritage Site behind the Mount Cook airport (a total area of 4,367 square kilometres; see Figure 3). An extension of Te Wāhipounamu would probably follow the IDA boundary. The physical barrier provided by the mountains between the Basin and the east coast towns and cities is also important. The potential for light to travel suggests the World Heritage *Operational Guidelines* criteria for buffer zones would have to be amended to

protect the attributes of starlight reserves and night landscapes. To date, the application for IDA status and exploration of the potential for World Heritage status have caused little local controversy. Twizel, the largest township in the Basin, with a population of about 1,000, has recently been included in the Outdoor Lighting Restriction Area in the Mackenzie District Plan 2004. Consultation carried out by the Mackenzie District Council has received positive feedback on preserving the night sky. The lack of controversy over the value of the night sky stands in contrast with the debate over land-based conservation initiatives.

The *Canterbury Regional Landscape Study Review* identified the entire Mackenzie Basin, including the valley floor and surrounding slopes and ridgelines, as an Outstanding Natural Feature and Landscape (ONF/L) (Environment

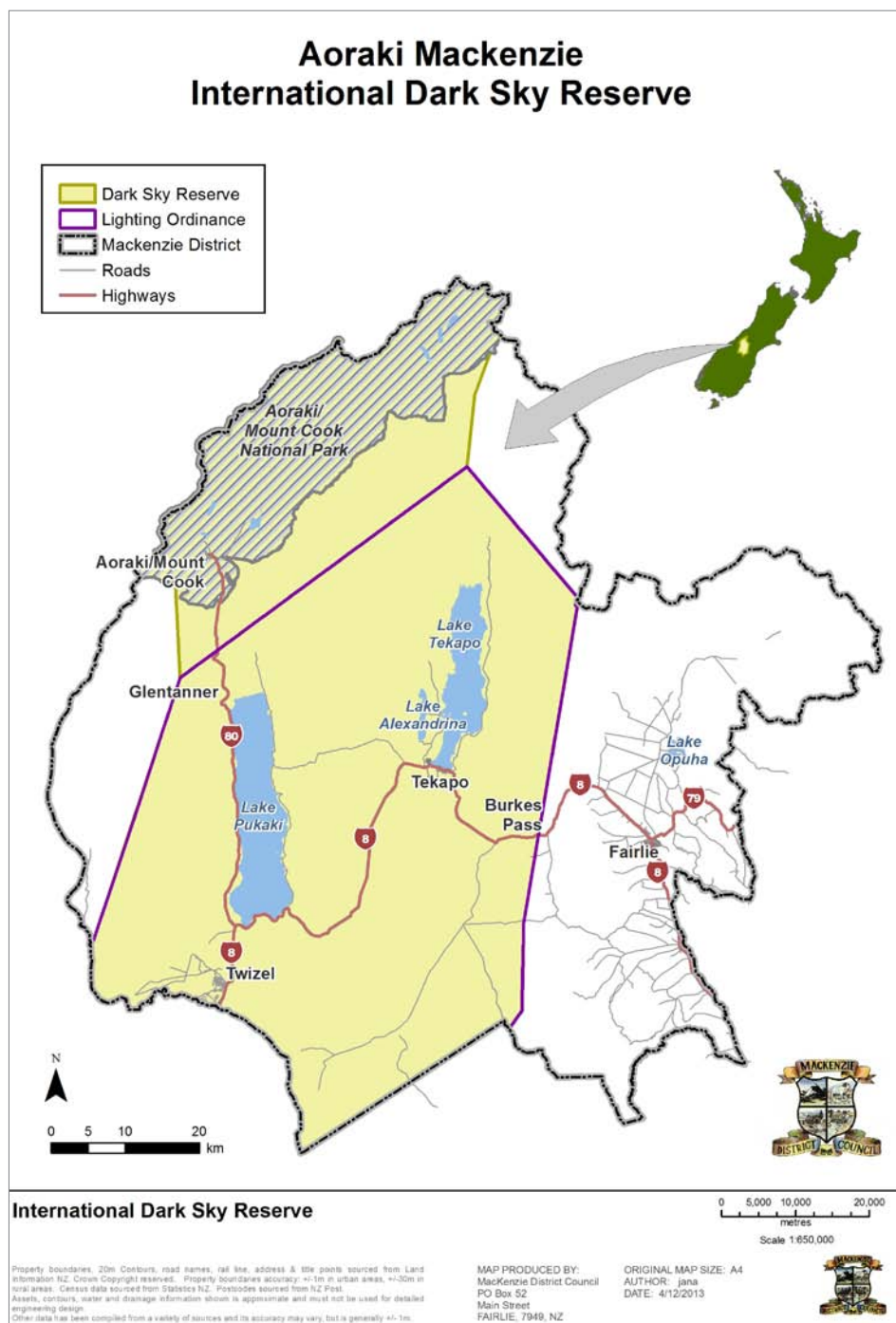


Figure 3: Map showing the boundaries of the IDA Aoraki Mackenzie Dark Sky Reserve (Mackenzie District Council, 2013).

Canterbury, 2010). Only a small section around and to the south of Twizel has been excluded, owing to high levels of human modification. This means the proposed starlight reserve World Heritage Site and its buffer zone fall within the designated ONF/L area. ONF/L was identified on the basis of several important landscape values, including aesthetic values such as the striking colour of lakes Tekapo and Pukaki, which form 'one of the most memorable landscapes in the country' (Environment Canterbury, 2010, p 142).

Given this ONF/L designation, management of the area should preserve the golden expansiveness of the tussock landscape, enhance the beauty and conservation values of the glacial lakes and ribbon-like braided rivers and preserve the general absence of people and human activity that enhances the area's aesthetic importance. Significantly, the night sky and its celestial bodies can be interpreted as 'superlative natural phenomena' (UNESCO World Heritage Centre, 2013, p 20). The lack of light pollution, the clarity of the night sky and the wide open vistas of the Mackenzie Basin create an area in which to view the 'exceptional natural beauty and aesthetic importance' of the night sky (UNESCO World Heritage Centre, 2013, p 20).

However, the ONF/L designation is contested. The Mackenzie District Council's Plan Change 13 sought to increase protection for the landscape values of the Basin (Mackenzie District Council, 2007). Defining a landscape as outstanding has ramifications for the application of the Resource Management Act 1991. The Mackenzie District Council's Plan Change 13 sought to increase protection for the landscape values of the Basin by recognising the ONF/L and managing development accordingly (Mackenzie District Council, 2007). However, this move was challenged by many parties, most often on the grounds that the landscape is highly modified (Collins et al, 2009). As a result of this public pressure, Plan Change 13 was altered so that the Mackenzie Basin is now defined as a distinctive and highly valued landscape with only some areas considered to be outstanding.

Arguments presented for and against defining the landscape as outstanding have been most recently revisited by the Environment Court's interim judgment in December 2011. At that time, the court called for the reinstatement of the original area as outstanding (Environment Court of New Zealand, 2011), but its final finding may not be available until 2015. If a convincing case for World Heritage Status is to be made, it will be crucial to confirm that all levels of government, from local to national, support the protection and management of landscape values deemed to contribute to the site's OUV. Judge Jon Jackson ruled an unfair burden of environmental responsibility should not be placed upon farmers, especially considering a large number of tourists and New Zealanders alike have enjoyed viewing the landscape (Environment Court of New Zealand, 2011). A mechanism for funding such protection has not been developed but could be essential for a future World Heritage application.

World Heritage requirements are consistent with a site's governance being undertaken by a network of co-managers from the public and private spheres, and with multiple sources of funding – 'a web of multiorganizational, multigovernmental, and multisectoral relationships' (Mitchell et al, 2009, p 72). Mitchell et al (2009) signal development of such webs is a long process, requiring years of negotiation, trial and adjustments. If there are indications that an

application for World Heritage status would be successful with the inclusion of the night sky, DOC, which represents the State Party, would probably spearhead formation of such governance networks and investigate diverse funding regimes. DOC is already moving in this direction with the conservation estate (Department of Conservation, 2013, p 5).

## Land management

This debate about landscape values can be understood in the context of uncertainty over the future development of the Basin. The great majority of land situated in the Aoraki Mackenzie Dark Sky Reserve is or was once held as Crown pastoral leasehold.<sup>13</sup> Some control over farming practices on these areas is retained through the Land Act 1948 and they are also covered by the Resource Management Act 1991. This has resulted in the general appearance of the landscape remaining relatively unchanged for the past 100 years or so (Parliamentary Commissioner for the Environment, 2009). As runholders gain private ownership of land via the tenure review process that has been available since 1998, they are free to undertake a much wider range of activities. Consequently, concerns have been raised that these activities will change the face of the Basin and affect the natural values of the land.

Changes to the Mackenzie Basin landscape over the past few decades, particularly in the south and as a result of irrigation schemes, are seen as reducing the landscape value of the Basin (Environment Court of New Zealand, 2011; Swaffield & Hughey, 2001). Change will undoubtedly continue, although the rate is contestable. Swaffield and Hughey suggest that an increasingly diverse landscape will emerge over the South Island high country as a whole and this ‘provides for a greater range of adaptive strategies and thus widens the knowledge base upon which future management can draw’ (2001, p 326). However, in terms of World Heritage status, the *Operational Guidelines* are clear – anything argued as contributing to the OUV of a proposed World Heritage Site must be able to be protected and sustainably managed for future generations (UNESCO World Heritage Centre, 2013, p 25). Irrigation, for example, has the potential to affect the reserve indirectly through intensification of production and associated buildings that may be lit at night. The growth of production or carbon sequestration forestry and spread of wilding pines are also a potential hindrance to viewing the full splendour of the night sky. World Heritage requirements would be best met by products such as merino wool that ‘associate product with place’ or conservation estate and/or farm-based outdoor recreation or cultural experiences seen as traditional in the Basin (Mitchell et al, 2009, p 76).

Measures taken to control many activities, such as limiting the development of farm bases and controlling new housing (eg, for retirees) and tourist accommodation, would have similar benefits for both day and night landscapes (see Figure 4). Attention to the sky may also be appropriate to the creation and protection of ecological corridors or networks of protected areas promoting both agricultural and wild biodiversity (Phillips, 2007). If a World Heritage listing provided new income streams through tourism or promotion of local production, these streams might help minimise the spread of introduced species, such as wilding pines and rabbits, which are current risks stretching the budgets of DOC and the Mackenzie District Council, as well as those of runholders.<sup>14</sup>



Figure 4: The Mount John Village subdivision, which is lit by bollards that comply with the requirements of the observatory (Fraser Gunn).



## Conclusion

While the individual cultural and natural elements present in the IDA Aoraki Mackenzie Dark Sky Reserve may not be enough on their own to establish the site's suitability for inclusion on the World Heritage List, the elements embody a diverse and unique cultural landscape, with the quality of the sky intimately linked to activities on the ground. Outdoor and nature-viewing activities are compatible with openness to a mood of acceptance of tranquillity and contemplation that is associated with the night sky and openness to learning about the universe (Miller, 2008). Careful lighting and the expansiveness of the landscape mean spectacular skies are accessible to everyone staying overnight in the Basin. Local enthusiasm for the IDA reserve is high.

Kirby's (1997) account of the establishment of Te Wāhipounamu World Heritage Site demonstrates how the process can raise concerns about the increase in oversight of local activities that is required. The recent controversy regarding the categorisation of the landscape and the need to resolve conflicts between tourism and other development in the daytime landscape reinforce the need to align community understandings and expectations as well as objective landscape judgements (Stephenson, 2007). Usually, the management control required for World Heritage status is achieved by obtaining national park status, but World Heritage thinking on this area is dynamic and is adapting to the needs of those such as farmers who are integral to the landscape. The night sky provides a new entrée into thinking about environmental issues in a multifunctional landscape.

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This article is part of an ongoing process of exploration of the potential for a World Heritage Site in the Mackenzie Basin, which coalesced into the formation of the Starlight Reserve Working Party in 2009, chaired by Margaret Austin. Members of the working party had been active in the area much earlier, with some attending the first and second starlight conferences, in La Palma in 2007 and Fuerteventura in 2009. The work undertaken by the authors during the 2010–11 summer and funded by the University of Canterbury is the principal source for this article. Another influence was discussion with the extensive team that worked on the application for reserve status to the International Dark-Sky Association and the IAU Extended Case Studies and Dark Sky Issues Workshop held at Mount Cook Village 14–15 June 2012. Particular acknowledgement is given to Clive Ruggles and Michel Cotte who reviewed the case studies for that workshop and to Margaret Austin and John Hearnshaw of the Starlight Reserve Working Party for their crucial role in developing the work programme. Our thanks also go to the anonymous reviewers of *Landscape Review*, although any problems in the final analysis are our responsibility alone.

## NOTES

- 1 The International Dark-Sky Association is a not for profit organisation whose secretariat is based in the United States. It promotes 'environmentally responsible outdoor lighting' through education, promotion of legislation, public policy and lighting standards.

- 2 Outstanding Universal Value signifies: ‘The loss, through deterioration or disappearance, of any of these most prized assets constitutes an impoverishment of the heritage of all the peoples of the world’ (UNESCO World Heritage Centre, 2008, p 2). Strasser (2002) emphasises the time taken to make changes to important definitions and processes concerning OUVs.
- 3 At present, the Aoraki Mount Cook National Park and several types of reserve managed by the Department of Conservation are included in the IDA area.
- 4 New Zealand has three World Heritage Sites and eight potential sites on its tentative list.
- 5 Only DOC can make an application for World Heritage List status on behalf of the State Party.
- 6 This employed the authors of this article in the summer of 2010–11, plus another three students in the summer of 2011–12 to help with the IDA application. The application was based on a literature review of the area (which has been extensively studied for many years) and interviews with 26 experts in DOC, the Mackenzie District Council, Environment Canterbury, Lincoln and Canterbury universities and Crown research institutes on the implications of protection of the night sky and World Heritage status (Abbari et al, 2011).
- 7 ‘The Tōpuni ... is an enduring symbol of the tribe’s commitment to conserving areas of high natural and historic values as well as ensuring an active role for Ngāi Tahu in the management of the area’ (Department of Conservation, no date). Ngāi Tahu is the local iwi (tribe) whose members see themselves as stewards of the land. They prepare their own environmental assessments and goals and participate in the planning process (see note 11).
- 8 A large number of geo-preservation sites exist in the area and are listed in the Mackenzie District Council Plan (2004, Appendix One, pp 113–114). The legibility of the Basin’s formative glacial processes makes these sites particularly valuable (Molloy, 2010).
- 9 Section 12 of the Mackenzie District Plan regulates lighting in the area covered by the IDA reserve.
- 10 See [www.frasergunn.co.nz](http://www.frasergunn.co.nz) and [www.youtube.com/user/FraserTK](http://www.youtube.com/user/FraserTK) for time-lapse photography.
- 11 The Resource Management Act 1991 is New Zealand’s main legislation for environmental management. Section 5 of the Act specifies local and regional governments’ responsibility for the management of resources in their locality to ‘promote the sustainable management of natural and physical resources’. Territorial local authorities, such as the Mackenzie District Council, administer various sections of the Act, the main instrument being a district plan, which provides guidance and standards for environmental management and inventories of heritage sites and other places needing special care.
- 12 Tangata whenua is the name Māori use for themselves as ‘indigenous peoples of the land’ with links to one or more specific localities ([www.maoridictionary.co.nz](http://www.maoridictionary.co.nz)).
- 13 This land has been leased to farmers by the Crown for pastoral grazing since the 1850s. Leases are for 33 years with a perpetual right of renewal. These large, extensively managed pastoral farms (the largest are around 20,000 hectares and the smallest around 10,000 hectares) are called runs in New Zealand and the leaseholders are called runholders.
- 14 As a step towards World Heritage status, the Mackenzie Sustainable Futures Trust has recently proposed that the government legislate for a stand-alone trust jointly appointed by the ministers for the Environment, Primary Industries and Māori Affairs. Under this proposal, 100,000 hectares of ecologically sensitive land could be protected through joint management agreements with landowners, the government and councils. Farmers’ financial contribution to conservation would be acknowledged by providing fencing or covering other costs (Littlewood, 2013b).

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# Lan Yuan: A Garden of Distant Longing: Book Review

IAN HENDERSON

*Lan Yuan: A Garden of Distant Longing*, James Beattie and Duncan Campbell, Dunedin: Dunedin Chinese Gardens Trust and Shanghai: Shanghai Museum, 2013; ISBN 978-0-473-25799-6

Of some currency in landscape architecture is a concern with issues of place-making and responsiveness to the particulars of locality (Burns & Kahn, 2005; Griffiths, 2013; Jackson, 1994; Relph, 1976). Recently, interest has been growing in the exchange of stylistically designed cultural artefacts in the form of gardens. The new Chinese garden in Dunedin is one of these, and James Beattie and Duncan Campbell have chronicled its inception, commission and construction in *Lan Yuan: A Garden of Distant Longing*. While these two ideas – of localness and the exotic – may appear at polarity with each other, they may have more in common than is at first apparent.

The title refers to the lot of the Cantonese gold miners who came to Otago in the latter part of the nineteenth century, for whom this garden is a memorial, and to the continuing place of following generations of these immigrants, for whom this garden is a celebration. The book begins with the story of these early arrivals, why they came and descriptions of the place from which they originated. It covers the construction of the built elements in China, their assemblage in Dunedin and aspects of design, typical of southern Chinese gardens of the Ming (1368–1644) and Ching (1644–1912) dynasties built by the literati.

Waves of immigrants have brought their gardens with them to Aotearoa New Zealand, from early Māori stonefields for kūmara production to a long series from the early nineteenth century onward. If Lan Yuan is representative of the Chinese gold miners and their descendants, it is no more exotic than other imported garden types; the only surprising thing may be that there have not been more Chinese gardens. In a real sense it is also part of our heritage, if our heritage is that of all of the people in Aotearoa New Zealand.

Debate about authenticity surrounds gardens like this, which are nominally of a certain type and/or style, particularly those of another time and a different regional place. Though authenticity is not mentioned by Beattie and Campbell, and it does not seem their intent to address it directly, they have mounted a compelling argument in its favour on behalf of this garden. In establishing the tenets of the southern Chinese scholar garden, as much from the design of Lan Yuan as any particular Chinese garden, such as the Garden of the Master of Fishing Nets (*Wangshi Yuan*) in Suzhou, China, they demonstrate this authenticity. In addition, this garden is discussed in terms of the relationships and associations

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REVIEW

typical of these gardens. The garden's layout, though not mentioned in the book, is simpler than the best known of the remaining extant or refurbished gardens of this type. Its pavilions surround the site to form a more or less singular space occupied by the garden. In the Suzhou garden, the pavilions are scattered throughout and, as such, are more integrated into its architecture, tending to divide it into a series of spaces and thus making it overall more complex than Dunedin's garden.

The book is limited to three chapters, but includes forewords, an introduction and several appendices. These all represent acknowledgement of the large group of people, including the local Chinese community and craftsmen from China who contributed to the inception, fundraising and building of this garden.

From a design perspective, the order of the chapters at first appears odd, with construction preceding design. However, in this case, the term 'design' is more noun than verb and more closely related to the stylistic devices and deep and complex references associated with Chinese scholar gardens and, ultimately, to reception (Hunt, 2004). Similarly, concepts (surely design associated) are given an airing in the section named 'Construction'; and aspects that are aesthetic, such as proportion, are in the same paragraph as precise craftsmanship.

On reflection, this structure has much to do with the Chinese association of things, which is less categorising and sequential than a Western approach. This too applies to gardens, which are not perceived as separate entities but in grouped associations with poetry, calligraphy, paintings, naming and natural scenery (Yinong, 2008). Overall, it is narrative-based with the logic of order and sequence driven by clusters and proximity of ideas.

Boxed sections provide for interesting asides, such as the significance of naming and of the site. It is difficult to know why these two in particular are singled out, rather than several others, which could equally well be conceived as asides. Presumably, the above point on narrative and variety applies.

Four direct contributors were involved in this book: Beattie and Campbell to the prose text, Wynston Cooper to the photographs and Sue Wootton to poetry. Of course drawings and archival material are also included. This mix of work contributes to the sense, Chinese in origin, that all these elements – text, poetry and images – are closely related. The garden, Lan Yuan, as such does not stand alone but in the company of a series of other cultural artefacts.

The technical information is comprehensive, covering a variety of aspects of design and build, but it could have benefited from a glossary of Chinese building terms, for example, *cao*. Dedication to supplying place names, titles and technical words in English, *pinyin* and traditional Chinese *hanzi* is thorough. All plant common names are followed by their botanical names and both *pinyin* and traditional Chinese *hanzi*. It is a pity the supplied planting plan in the appendices does not follow botanical rules and include all such names.

The book's production is of a high quality. The photographs are high resolution, even those from the nineteenth-century goldfields and Canton, as are the technical drawings, which mainly cover elevations of the pavilions and gate, revealing details of roof-top dragons and lattice-work, even at the relatively small scale of these drawings. Successive pages dedicated to images, photos and technical drawings allow for a journey through the garden, especially at various

construction stages. Pages with multiple images have a layout diagram to key the images to the captions and descriptions. From a designer's perspective, the label 'concept' assigned to the draughted elevations could be considered concept only in as much as they are drawings and not built form.

Although plenty of technical and specific cultural information has been included, this first account of the Dunedin Chinese garden is populist enough to be accessible to a wide audience, which has the opportunity to gain an understanding of the ideas behind the garden and to enhance their visiting experience. This book explains what otherwise could remain exotic, 'foreign' and incomprehensible. This record enhances the significance and standing of Dunedin's Chinese garden, so that it may be less likely to suffer the ignominy of destruction that has befallen the Fukuoka Friendship Garden at the Auckland Zoological Park.

Until greater respect is afforded to our landscape and gardens, or because greater respect might only come with chronicles of this worth, we should perhaps ensure they have an associated literature, particularly for those gardens and landscapes we value.

The book ends without a full summary or conclusion, except that the first appendix acts somewhat as a finishing point; naming it 'Looking to the Future', appropriately the authors have allowed the last word to go to the Chair of the Dunedin Chinese Garden Trust. The authors finish their last chapter with 'the period of Lan Yuan's construction phase had ended, but its story was only just beginning' (Beattie & Campbell, 2013, p 91). They have recorded the beginnings, with an expectation that further histories on Dunedin's Lan Yuan will follow.

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# Go With Me: 50 Steps to Landscape Thinking: Book Review

SHANNON DAVIS

*Go With Me: 50 Steps to Landscape Thinking*, Thomas Oles, with Marieke Timmermans and Jacques Abelman, Amsterdam: Architectura & Natura Press; 2014; ISBN 9789461400383

*Go With Me: 50 Steps to Landscape Thinking* is a handbook and an essential guide for both students of landscape architecture and professionals alike. It provides inspiration, initiates questions and encourages readers to look at landscapes anew – guiding their discovery of them in an inclusive and profound way.

This is a handbook to be taken on site, to sit next to you at the drawing desk or beside the computer, to be read before, during and after project completion. Dropped into a satchel, slipped into a pocket, held in hand, the book offers direction and inspiration at each stage of the design process. Its physical form, a small, ‘hardy’, beautifully textured book, lends itself perfectly to this purpose, while its intellectual content fulfils the role of an essential guide – a vademecum or an authentic ‘go with me’.

Created by Thomas Oles, with contributions from Marieke Timmermans and Jacques Abelman of the Amsterdam School of the Arts, the book was developed based on the lectureship programme ‘The Living Landscape’ within the Masters programme of the Landscape Architecture Department 2010–12. The programme was set up to ‘help students unravel the complex meaning of landscape and find out how the “living” part of landscapes is linked to the spatial quality of landscapes’ (Timmermans, 2014, p 18).

By introducing discussion on the evolving meaning, ever-changing and deep qualities of ‘landscape’, the handbook proposes to allow us to look at ‘landscapes’ afresh. Described as not being a static image, a picture painted by nature or designed by man, ‘landscape’ here is considered a ‘temporary result of social, economic and political movements, as a snapshot in the continuous interaction between patterns of human occupation and natural processes’ (Oxenaar, 2014, p 15). Inspired by this definition, the text guides readers to ‘seeing’ and understanding the landscape in this way.

The book is organised into five categories relevant to the design process – sensing, reasoning, showing, changing, testing – and each section contains 10 essential ‘propositions’ or principles for engagement. Each principle is introduced by an epigraph intended to highlight and challenge the consideration of ‘other’ voices in the landscape discussion. Two or more key texts are also referred to under each principle, to expand its meaning. ‘Some are essential works in the

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REVIEW



profession ... while others bridge ... unfamiliar territory in our design educations' (Abelman, 2014, p 27). Introducing, as a result, over a hundred possibilities for additional exploration and research, these key texts provide a useful 'next step' of enquiry. Each principle comprises a short discussion, often including questions for individual contemplation, and includes a type of 'so what' proposition, which explicitly directs and challenges an act of thinking or design, either practical or theoretical. From the section 'Showing', step 26 suggests:

*26 Come to Your Senses*

Familiarity erases immediacy. First, when you did not know the place, when the stuff of the world had yet to arrange itself into hierarchies, everything was as important as everything else. You noticed big things – the long slope of land toward sea, the red-orange ribbon of a river – but also the hand-painted sign on an old boundary, the sound a snake made sliding up stone, the hard taste of olive branch smoke. You did not have ideas, only movement and sense. Later, as you came to know the place, to rank and organize its contents, this tangle of impressions receded to the margins of your mind, where it languished, half-remembered. Yet you were never again as present as during those first precious moments.

So: when you have your ideas, return to the site before ideas, before reasoning, even before thought. Recover the landscape as pure sense and motion, show the self open to the riot of the world.

In providing such 'tools', these 50 steps to landscape thinking deliver a well-considered, enlightened and clear outline for contemplating 'landscape' and all the dimensions it encompasses.

In his current role as Assistant Professor of Landscape Architecture at Cornell University, Thomas Oles teaches and researches in the areas of cultural history and the theoretical foundations of landscape architecture. This book of 'tools' will be equally encouraging for those ingrained in landscape architecture practice to once again engage with design theory, sensitise, dis-connect and perceive the landscape in new ways, as it will be for design students learning and developing an understanding of landscape and design process.

So thumb this book, bend it, fold it, drop it into icy water on half-frozen lakes, carry it in your backpack as you wade through canals and across deserts. But use it. Use it to focus the attention, to hone the senses, to broaden the mind. Use it again and again to think landscape, and landscape architecture, anew (Oles, 2014, p 24).

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Oxenaar, A (2014) Foreword. In *Go With Me: 50 Steps to Landscape Thinking*, Thomas Oles, with Marieke Timmermans and Jacques Abelman, Amsterdam: Architectura & Natura Press.

# Making Landscape Architecture in Australia: Book Review

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*Making Landscape Architecture in Australia, Andrew Saniga, Sydney: UNSW Press, 2012; ISBN 9781742233550*

Andrew Saniga's *Making Landscape Architecture in Australia* sets out several objectives including encapsulating what landscape architecture is, providing a framework for situating additional exemplars and offering a point of critical reflection for practitioners. While the objectives are directed at an Australian readership, they offer value from other perspectives too, including those of us nearby Kiwis, as well as other countries of the New World, particularly the former British Empire. There are shared points in that familial tie, as well as distinctive points of difference, which also shed light on the insistence of regionalism. Aspects of climate, topography and indigenous culture are some of the most salient areas in which histories unfurl in different ways. But in terms of the complexity of how we value the landscape – both natural and cultural – the challenges are common.

One question that haunts any history of landscape architecture is the very nature of the profession itself. Tracing the origins of the term 'landscape architect' is a genealogical crisis that inevitably besets historical texts relating to our profession. Saniga's rehearsing of these origins begs the question of when we will be as confident as architects who do not constantly question their founding terminology. In tracing the development of the profession, Saniga notes those who did or didn't call themselves a landscape architect, and those who used other titles.

The idea that nomenclature defines the profession is a complex one, and although it might clarify when landscape architecture arrived, it can also obscure nuanced developments. Saniga carefully explores the individuals and groups that contributed to what we now think of as landscape architecture. Ranging from garden designers to city planners, and dealing with everything from planting schemes to housing layouts, these eclectic origins underpin the diversity that remains characteristic of the profession.

Some of the main influences in the profession's development came not from those internal to the idea of landscape architecture, but from external drivers such as social change, concerns about the environment and population growth. Saniga highlights the variety of ways in which the burgeoning collective that might be called landscape architecture plotted a course through these sea changes. In some cases, the leaps in development are attributable to individuals; in Australia, for example, the arrival of Walter Burley Griffin and Marion Mahony Griffin left an indelible mark on the sensibility of landscape architecture. After winning the

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REVIEW

competition to design Canberra, the Griffins left Chicago to take up residence in Australia in 1912, and their influence spread far beyond Canberra itself. Like many places, Australia benefited from the exodus of talented designers from Europe in the early twentieth century. As with the influence of Walter Gropius and Ludwig Mies van der Rohe in the United States, and Helmut Einhorn and the Plischkes in New Zealand, Australia received immigrants from across Europe, introducing a sensibility born of centuries of refinement. Latvians, Lithuanians, Hungarians, Germans and Czechs, trained in landscape architecture and allied fields, added to the cumulative shifts in design thinking in Australia, including the use of stone and the clean lines of post-war modernism.

A thread tracing through the text is the value attached to indigenous Australian plants. While home owners in the early years of European settlement in cities set about clearing the native vegetation from their properties, Saniga points to the example of Clement Hodgkinson's plan for what was then the East St Kilda Reserve in Melbourne (1867). The plan included an area of protected indigenous vegetation, within an otherwise unremarkable layout. The Griffins, in particular Marion, also had considerable influence on elevating the place of indigenous planting in landscape architecture. Examples like this reveal how the legacy of the forerunners of the profession of landscape architecture provides significant insight. It is also a potent reminder of how our own actions can have positive influences in the landscape centuries later. Landscape architecture is not a profession of immediate gratification, and requires a degree of self-sacrifice by designers who might never see their projects fully realised, especially in relation to vegetation. This altruistic dimension of the profession is true also of the work involved in infrastructure. Saniga describes the highway work that landscape architect Peter Spooner helped shape during the 1960s and how integrated it was with that of the engineers. Landscape architecture, when well done, can become invisible or be so much of a cohesive multi-disciplinary effort that it is indistinguishable.

For New Zealanders, there are many resonances with Saniga's account of landscape architecture in Australia, including the movement of practitioners in both directions across the Tasman. Of course, any comparison between the two countries inevitably brings out the competitive spirit. The publishing of *Making Landscape Architecture in Australia* is testament to a certain maturing of the profession in that country. And, as is the way with 'little sibling' countries like New Zealand, this provides an aspirational goal in terms of realising a critical mass and a sufficient history to make an overview timely. But, it is interesting to note, in the spirit of competition, that New Zealand did beat Australia to the post in terms of the first professional journal. At the time when the first issue of *Landscape Australia* was published in 1979, the New Zealand Institute of Landscape Architect's journal, *The Landscape*, had already been produced for three years.

The other dimension of the close bond between the two countries is a fond familial regard and the respect that comes with that. It is with this sense of fraternity that there is a real pride in Saniga's work and the story of Australia's landscape architecture profession. It is enjoyable to read familiar stories and about battles that have parallels here, and the familiar names – Peter Spooner, Jim Sinatra, George Seddon – who have featured at conferences and other exchanges. Also familiar are the debates over the place of indigenous plants –

and indigenous culture – and what national identity means. While Saniga’s book is emphatically about Australia, it offers something of a mirror for New Zealand. Because Australian landscape architecture is a product of designers from around the world, the book will be a useful reference to the teaching of landscape architectural history globally.