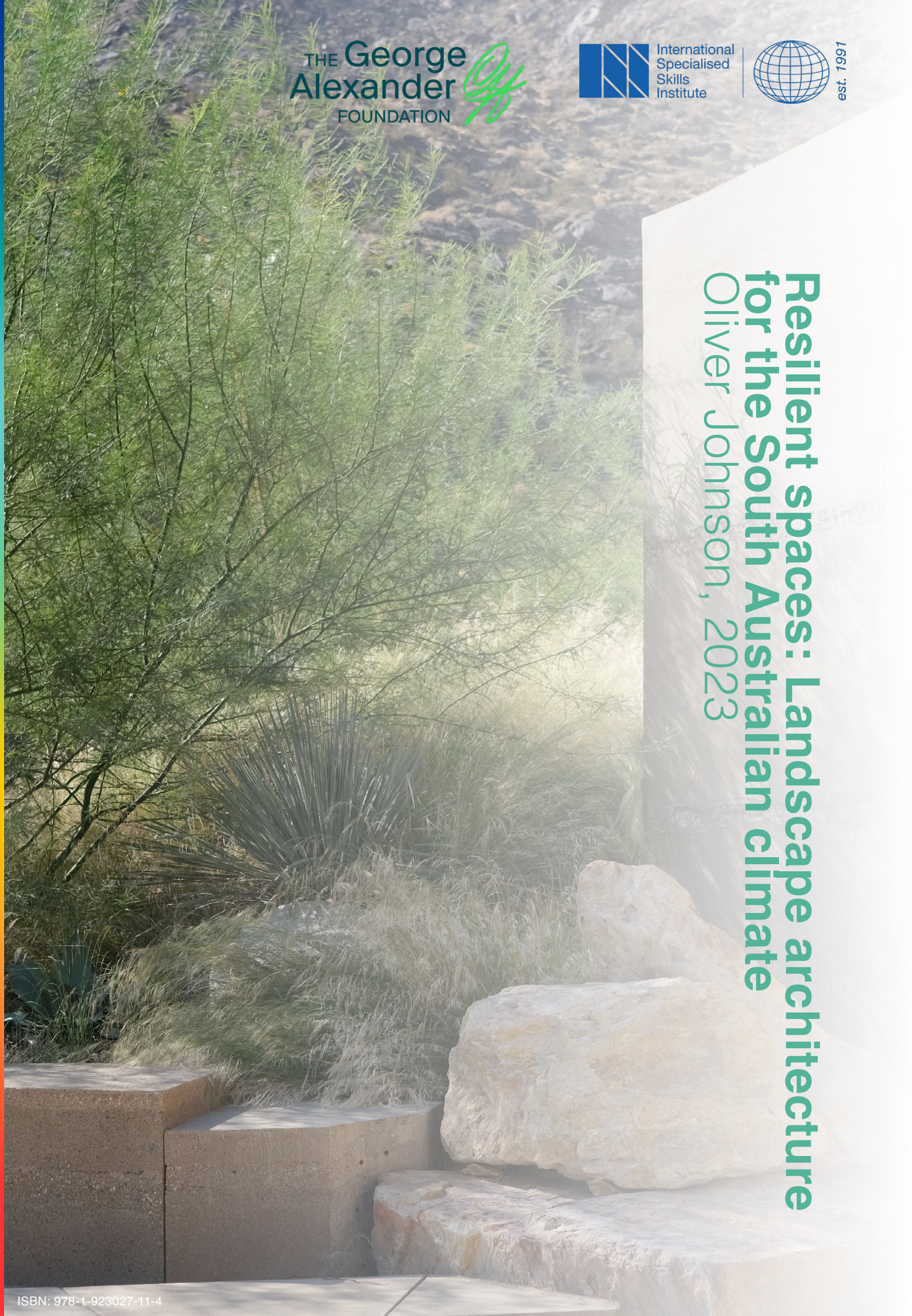

THE George Alexander FOUNDATION

International Specialised Skills Institute

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Resilient spaces: Landscape architecture for the South Australian climate

Oliver Johnson, 2023

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Report by Oliver Johnson

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The International Specialised Skills Institute

1/189 Faraday St,
Carlton VIC 3053

info@issinstitute.org.au
+61 03 9347 4583

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1. Acknowledgments

The Awarding Body – International Specialised Skills (ISS) Institute

The ISS Institute plays a pivotal role in creating value and opportunity, encouraging new thinking and early adoption of ideas and practice by investing in individuals.

The overarching aim of the ISS Institute is to support the development of a 'Better Skilled Australia'. The Institute does this via the provision of Fellowships that allow Australians to undertake international skills development and applied research that will positively impact Australian industry and the broader community.

The ISS Institute was founded 29 years ago by a small group of innovators, including Sir James Gobbo AC, CVO, QC, and former Governor of Victoria, who had a vision of building a community of industry specialists who would lead the up-skilling of the Australian workforce. The Fellowship program builds shared learning, leadership and innovation across the broad range of industry sectors worked with. Fellows are supported to disseminate learning and ideas, facilitate change and advocate for best practices by sharing their Fellowship learnings with peers, colleagues, government, industry and community. Since its establishment, ISS Institute has supported over 450 Fellows to undertake skill and knowledge enhancement across a wide range of sectors which has led to positive change, the adoption of best practice approaches and new ways of working in Australia.

The Fellowship programs are led by our partners and designed to achieve the needs and goals desired by the partners. ISS Institute works closely to develop a Fellowship program that meets key industry priorities, thus ensuring that the investment will have a lasting impact.

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The Fellow sincerely thanks The George Alexander Foundation for providing funding support for the ISS Institute and for this Fellowship. In 1972, George Alexander AM (1910 - 2008) set up an independent philanthropic Foundation as a way of sharing his wealth and giving back to the community. Today, the focus of The George Alexander Foundation is access to education for promising young people, particularly students with financial need and those from rural and remote areas.

The George Alexander Foundation (GAF) Scholarship and Fellowship Programs form the core of the foundation's work, operating in partnership with major tertiary institutions, while our Fellowships and other Education grants provide a variety of other unique and challenging educational experiences. George Alexander believed in the notion of 'planting seeds and hoping they grow into pretty big trees.' The programs supported by the Foundation endeavour to support this ideal and as GAF students graduate and go on to contribute to the community, George's legacy and spirit lives on through their achievements. George Alexander came to Australia as a child migrant, and went on to become a mechanic, an entrepreneur and a businessman and later, a generous philanthropist, who held that you do not own the possessions you have, 'you're just minding them'. This philosophy guided him to give during his lifetime and to hope that through his example, he might inspire others to do the same.

Employer Support

The Fellow is grateful to his employer, Oxigen Landscape Architecture + Urban Design in Adelaide, South Australia for the opportunity to participate in the Fellowship program.

The Fellow wishes to acknowledge the support of the following colleagues who supported him to undertake the Fellowship:

James Hayter, Director

- Oxigen Landscape Architecture + Urban Design

Travis Wright, Director

- Oxigen Landscape Architecture + Urban Design

Fellowship contributors

The Fellow wishes to acknowledge the generosity of the following individuals who shared their time, experience, and expertise during the Fellowship:

Terremoto - San Francisco Office

- Alain Peroui

Terremoto - Los Angeles Office

- Jenny Jones
- David Godshall

Marrakesh Mediterranean Garden Tour

Mediterranean Garden Society, particularly key South Australian attendees:

- Mark Barnett
- Jill Woodlands

Zaha Hadid, London Office

- Edward Meyers

BIG (Bjarke Ingels Group), New York Office

- James Pratt

Other Supporters

- The Fellow would like to thank the Australian Institute of Landscape Architects, in particular the support provided by South Australian President Daniel Bennett and South Australian Chapter Manager Sally Bolton.
- Jesper Angcaya for all his assistance in navigating through California.

2. Executive Summary

Background

South Australia has a unique climate, with dry arid conditions to the north and, as you transition south along the ranges to the coastline, a Mediterranean climate. As our climate continues to grow warmer and drier, landscape architects are faced with the difficult challenge of creating enduring and robust green spaces that can tolerate harsh conditions.

This Fellowship investigates the specific techniques and approaches being used internationally that are enhancing and redefining how landscape architects respond to our changing climates. It focuses on similar climate zones overseas, particularly the Mediterranean and California, and aims to deepen practice and understanding of emerging strategies for creating resilient spaces and their application to South Australia.

The Fellow, Oliver Johnson is a practising Landscape Architect in Adelaide, South Australia. Based at a landscape architecture and urban design firm - Oxigen, he is involved in various scales of work, varying from small residential gardens to large scale public spaces and strategic master plans. All projects vary in location from central Adelaide to remote regional towns and national parks.

During September and October of 2022, Oliver spent 8 weeks travelling across the Mediterranean, both Europe and North Africa, and the United States. Commencing in Morocco, he attended the annual international garden tour by the Mediterranean Garden Society. The tour involved visiting a series of private and public gardens around Marrakesh that provided insight into various Mediterranean planting methods and techniques in an arid and dry climate.

With a focus continued toward Mediterranean climates, he travelled on to Spain, Portugal and Italy reviewing a series of public spaces and gardens.

For the second portion, he travelled to the United States, starting in New York. He visited numerous sites that demonstrate how high-density cities are providing quality public spaces in response to limited open space. Sites visited demonstrated the fine balance of creating urban spaces that are considerate of the context and history of the place and enduring through the selection of materials and methods.

Ending his overseas research in California, he visited a mixture of sites that focused on creating functional and sustainable public and private spaces in larger scale dry and arid environments. He met with landscape architects in both San Francisco and Los Angeles, gaining a perspective on how the industry is progressing and its direction forward over the next 10 years. Alongside this he also visited Yosemite and Joshua Tree National Parks, providing perspective on how natural environments are managed with high tourism usage.

Figure 1. Anima Garden, Andre Heller – Marrakesh, Morocco

Fellowship learnings

From his time overseas the Fellow identified three key skill enhancements areas:

1. Mediterranean, dry and arid gardens

As climates continue to grow warmer it will be important to create more sustainable green spaces that can endure and tolerate higher temperatures while also being considerate of water supply.

2. Vernacular design and adaptation

There is a tendency in current landscape architecture design for over-designed landscapes that start with a green field or clear site and then produce high-end glamorous photo worthy projects, which require significant funding and can often look out of place in the existing environment. This practice is slowly shifting, towards a “less is more” approach with greater importance and focus placed upon connection to the existing site and its broader physical, environmental, historical and cultural context.

3. Land Stewardship and Management

Land stewardship and how we sustainably manage the land over time in order to create and conserve resilient, enduring green spaces, taking into consideration ecological, economic, social and cultural dimensions.

Personal, professional, and industry impact

During his travels Oliver developed an online blog, which was used to share and present his findings from sites visited. On his return from his overseas research, Oliver commenced sharing his findings with colleagues and other landscape architects within the industry. He has begun incorporating various techniques and approaches in his work and will continue to apply and share this knowledge with colleagues. Moving forward he intends to transform his online blog into a printed publication which will accompany an exhibition to the industry and the public to further share his findings and broaden awareness. This will also be supported by presentations and/or mentoring to emerging professionals, both students and graduates.

Considerations and recommendations

These findings aim to bring a new layer of thinking to the Australian industry, prompting further discussions, inspiration and applicable techniques and principles for landscape architects to pursue further in the design of our spaces.

Figure 2. Brooklyn Bridge Park by MVVA Inc. - Brooklyn, New York

3. Fellowship Background

Fellowship context

Landscape Architecture in Australia as a profession has been established for many years, however as the awareness of climate change grows and greater importance is put on future proofing our urban and natural environments, the role of landscape architects is becoming more important.

Too often designs are driven by form and not from the site. We have reached a point where we over design and provide too much rather than striving to do as little as possible. Many designers have developed a set rigid style that identifies them as a point of difference. We as designers need to step back and allow the site, with its historical, ecological, social and cultural context to guide the design outcome.

Coupled with this there is an outdated approach in the design of spaces that continues despite issues with long term sustainability. Many landscapes have been designed and built with the assumption that they will be taken care of. These landscapes become dependent on external inputs that are now becoming more fragile and cost intensive as our climate becomes unpredictable and volatile. When these landscapes have a minor shift, e.g. an extended heatwave, irrigation failure, etc, they begin to fail and deteriorate immediately. As a profession, we have a role to create spaces that are resilient and adaptive to these future climate changes. This is particularly vital to the survival of future green space in South Australia.

Within Australia we have limited access to international best-practice. Geographically we are isolated, restricting both our ability to engage in professional collaboration internationally and our access to global innovation. The opportunity to visit and discuss a series of landscapes with professionals internationally has enabled critical exposure for the Fellow. Additionally, learnings will be applicable to South Australia's climate issues which align with select climates overseas rather than other examples interstate.

There is limited opportunity as a landscape architect based in Australia to gain hands-on knowledge of projects internationally. This fellowship has provided the opportunity to explore various private and public landscapes from different countries, gaining insight into different design methods and styles with the opportunity to discuss and ask questions of the designers.

Fellowship aims

The aim of this fellowship was to investigate and gain skills enhancement in the techniques and approaches being used by international landscape architecture firms, specifically in regions climatically similar to South Australia. The Fellow aims for these findings to be tested and applied in a South Australian context. There is not one solution, but a mixture of techniques, principles and approaches that have been considered and reviewed. These include:

- Horticultural techniques, in particular Mediterranean, arid and dry garden planting styles that require minimal irrigation.
- The use and application of local trades and materials, that minimises outsourcing work, retains support to the local industry and lowers the carbon footprint. This enables the Fellow to understand methods and techniques to collaborate with local trades, particularly through the design process and how different materials can be adapted.
- Innovative techniques in designing enduring landscapes that require minimal irrigation and are able to tolerate dry, arid and Mediterranean climates. This will broaden the Fellow's perspective on alternative techniques for designing enduring and resilient spaces.
- Adaptive re-use applications in incorporating the existing natural and built fabric of a site into a new purpose and function. The Fellow will gain broader perspectives on how existing elements of a site can be incorporated in a considerate and well balanced design approach.

Fellowship methodology

Over an 8-week period, Oliver visited numerous sites across the Mediterranean and the United States of America. He engaged in applied research through a variety of methods including:

- Visitation and tours of sites demonstrating techniques and approaches in adapting to dry and arid climates.
- Formal meetings with professionals within the landscape architecture industry that are demonstrating how they are responding to changing climates.
- Informal visitor observations in public spaces.
- Case study assessments of significant sites.

Fellowship period

The background research for this Fellowship was conducted in Australia over 12 months beginning in June 2022 upon the award of the Fellowship to the Fellow. The international portion of the Fellowship was conducted in September and October 2022 over an 8 week period at the following sites and countries:

- Museum of the Future, Dubai
- Barcelona Botanic Gardens, Barcelona, Spain
- Parc Guell, Barcelona, Spain
- Madrid Rio, Madrid, Spain
- Anima, Marrakesh, Morocco
- Beldi Country Club, Marrakesh, Morocco
- Jnane Tamsna, Marrakesh, Morocco
- Villa Oasis, Marrakesh, Morocco

- Jardin Marjorelle, Marrakesh, Morocco
- Cactus Thiemann, Marrakesh, Morocco
- Jardin Secret, Marrakesh, Morocco
- Parque Monserrate, Sintra, Portugal
- Giardini Mortella, Ischia, Italy
- Giardini Ravino, Ischia, Italy
- Zaha Hadid Office, London, UK
- Terremoto Office, San Francisco, USA
- Bjarke Ingels Group Office, New York, USA
- Brooklyn Bridge Park, New York, USA
- Max Family Garden, New York, USA
- Domino Park, New York, USA
- Little Island, New York, USA
- Teardrop Park, New York, USA
- Highline, New York, USA
- Governors Island, New York, USA
- Yosemite National Park, California, USA
- The Moorten Botanical Garden, Palm Springs, USA
- Downtown Park, Palm Springs, USA
- Multiple private residential gardens, Palm Springs, USA
- Sunnylands Estate & Gardens, Palm Springs, USA
- Joshua Tree National Park, USA
- Tongva Park, Los Angeles, USA
- Test Plot, Los Angeles, USA
- Huntington Botanical Gardens, Los Angeles, USA

Figure 3. Jnane Tamsna - Marrakesh, Morocco.

Fellow biography

At the time of writing this report the Fellow is employed as a registered practising landscape architect at Oxigen Landscape Architects + Urban Designers in Adelaide, South Australia. He has been based at this firm since graduating in a Masters of Landscape Architecture from the University of Adelaide in 2015. His knowledge and skills as a landscape architect have developed in this role from an early graduate to a now senior staff member. He has been involved in various types of work from streetscapes and significant public space upgrades, in regional and metropolitan areas, bushfire recovery projects, development and design of an Aboriginal cemetery for ancestral repatriated remains, to large scale master plans reports for key public spaces within greater Adelaide and interstate.

Qualifications:

Masters of Landscape Architecture
University of Adelaide, South Australia
March 2013 - November 2014

Bachelor of Design Studies
University of Adelaide, South Australia
March 2010 – November 2012

Professional membership

Member of the Australian Institute of Landscape Architects (AILA)

Professional awards

AILA South Australian 2019 Future Leader Graduate Award Recipient

Figure 4. Oliver Johnson at Moorten Botanical Gardens, Palm Springs CA.

Abbreviations, Acronyms and Definitions

Adaptive reuse	The process of reusing an existing building or elements for a purpose other than which it was originally built or designed for.
AILA	Australian Institute of Landscape Architects
Materiality	The types of materials and finishes being applied to create a style and identity to a space e.g. etched stone, exposed concrete, hardwood timber etc.
MGS	Mediterranean Garden Society
Planting palettes	A selection of plant species that provides an overall planting style and character to a space.
Vernacular design	A type of local or regional construction, using traditional materials and resources from the area.
WSUD	Water Sensitive Urban Design is a design and planning approach to developing integrated stormwater management solutions in urban environments. It aims to minimise water runoff and ensure any runoff causes the least amount of damage.

4. Fellowship Learnings: Skill Enhancement

SKILL 01 - MEDITERRANEAN, DRY + ARID GARDENS

As our climate continues to grow warmer, we need to create green spaces that can endure and tolerate higher temperatures while also being considerate of water supply and infrastructure costs. The following techniques have been investigated overseas with the findings collated:

Planting

Planting palettes and styles varied from each region visited, however overall there was a selection of species that acknowledged the native environment and the climate conditions. Sites varied in the level of irrigation used, however predominantly most spaces relied on some form of irrigation as support. The water source was a key factor in determining this supply, particularly in gardens based in Morocco. All successful gardens were irrigated by onsite bores.

Visiting California and meeting with landscape architects a general planting principle was applied of a 70% native and 30% exotic palette. This provides an adequate balance to create an environment that supports the natural ecosystem while also achieving a maintainable space. Exotic species selected are drought tolerant and contribute to the visual aesthetics of the space. Consideration is also still taken for existing plants and trees onsite, ensuring they are non-invasive and of significance to the site.

“70% of new planting is endemic or edible. Non-invasive species are allowed, but should be competitive with the native species in their water use within a couple years”. - David Godshall

Figure 5. Le Jardin Secret - Marrakesh, Morocco

Figure 6. Downtown Park, RIOS - Palm Springs, CA.

Surfaces

From reviewing a series of private and public spaces, surfaces have been divided into hard and soft.

Hard Surfaces

Overall there was a focus toward surfaces that can be reused and are considerate to the region. In small to medium scale spaces, large surface areas of concrete were avoided and its use was only applied where necessary. Natural gravels and sands, timber, and stone were key materials applied. In high use public spaces, large surface areas of in-situ concrete were avoided, with a focus towards use of natural stone paving or hotmix.

Soft Surfaces

From observations across all regions visited, lawns were only evident in critical areas of high use, particularly New York, where open space is limited.

In both Los Angeles and San Francisco, landscape architects are advocating for less lawn. Irrigated lawn has been historically used for decades as a surface material to infill large expanses of open space. These lawn areas are rarely used by the public, and require a high level of upkeep and use an exorbitant amount of water.

Where lawn is not a necessity, its area is minimised. In these areas a lawn variety should be selected that requires minimal upkeep and water consumption. In areas such as Palm Springs, there has been a gradual shift to removing lawns and replacing them with alternative surfaces, with a focus towards gravels mixed with planting or low maintenance lawn varieties. In all instances artificial turf was avoided, due to its high use of plastic and short life span which then becomes a further plastic waste product.

Figure 7. Private residence, Terremoto - Los Angeles, CA. (photo by Stephen Schauer)

Figure 8. Private residence - Palm Springs, CA.

Water / irrigation usage

The application of irrigation to private and public spaces varied across all regions visited. This was dependent on cost, groundwater access, climate conditions and future proofed design.

Across Morocco all gardens visited were dependent on a groundwater source. The access and use of this water supply is costly and reduces its use to those who are willing and able to sustain the cost.

California provided insight to an industry that is responding to a long-term drought through various new methods. There is a shift to minimising the extent of irrigation, to either be for establishment only or by hand watering. With these methods, other design techniques must be implemented such as, planting selection, shade, level of maintenance etc.

The reduction in the use of modern irrigation systems is also linked to the raising awareness of high plastic usage. Current systems require an excessive amount of poly pipe and plastic fittings which cannot be re-used and/or become obsolete.

Figure 9. Sunnylands Estate, James Burnett - Palm Springs, CA.

Figure 10. Riad Nouria, Son Muda - Marrakesh, Morocco

SKILL 02 - VERNACULAR DESIGN + ADAPTATION

There is a current approach with landscape architecture to commence by creating a clear site; erasing the old to make way for a new and straight forward design process. As open usable space becomes far more sparse, there must be greater consideration for how existing sites can be used. With this there needs to be greater importance and focus towards connection to land, and responding to the natural climate, rather than competing with it. We must respect the genius loci when designing.

Adaptive Reuse

A chosen site is already a landscape with its geography, weather, history and culture. There is never a blank canvas. Through retaining the old and creating a space where both new and old can co-exist, we are able to create iconic and unique spaces.

Many of the sites visited in the United States demonstrated various techniques of adaptive re-use. This varied from small to large scale elements. Rather than over complicating the space with new forms and objects, the landscape is driven by previous elements and structures.

The Max Family Garden by MVVA Inc, retained the original outer brick facade and converted the internal building layout to an open roof courtyard. Offering a courtyard that is very informal with pockets of greenery and natural stone seating to create a space that does not compete with the existing building form but complements it to offer a memorable and characteristic space.

Figure 11. The Max Family Garden, MVVA + Associates - Brooklyn, NY

Figure 12. Domino Park, Field Operations - Brooklyn, NY

Materiality

In predominantly all sites visited, materiality was a critical factor in how the spaces aged and also how they contributed to the look and feel experienced by the public.

There was an emphasis on local materiality, such as repurposing nearby materials or demolition remains. The key factor being that materials are sourced within a close proximity lessening the future carbon footprint through either re-use or returned to the land they were sourced from.

Natural building materials were widely used across all projects visited and contributed greatly to the timelessness of the spaces. Through creating forms from natural materials, they become unique and a point of difference.

Throughout gardens visited in Morocco, there was a common theme of locally sourced materials and a colour palette that was reflective of the region. While some of these gardens were either very formal or had some highly contrasting elements, they all had an element of commonality with linking back to the natural landscape.

“Building materials that come from nearby are also inherently carbon-light, tell a more meaningful story, and—in an interesting way—build local networks and communities that make our cities and regions more economically self-reliant and strong.” - David Godshall, Terrmoto

Figure 13. Anima Garden, Andre Heller - Marrakesh, Morocco

Figure 14. The Max Family Garden, MVVA Inc. - Brooklyn, NY

Figure 15. Downtown Park, RIOS - Palm Springs, CA.

Design Approach

From visiting a series of sites over different regions, design themes were observed that contributed to creating attractive and usable spaces. These included:

- Consideration of local sourcing, with materials, elements and planting palette all coexisting with the existing environment and surroundings.
- Simplified - the most successful spaces were the simplest and not over designed. Through the selection and use of certain materials and planting, spaces were unique and timeless without becoming overly cluttered.
- Responding to the site - the layout and configuration of spaces is not forced or copied from elsewhere. Layouts were naturally formed in response to the existing site and its historical and cultural context.

Terremoto, based in California, have developed a series of new rules / principles that they are testing. These are not all applied, but demonstrate the steps they are taking to reach new approaches to designing their spaces.

Radical Gardens of Love and Interconnectedness by Terremoto

1. Old plus new need to coexist.
2. Existing non-invasive plants of significance should probably stay.
3. Cut and fill are balanced, no dirt should leave the site.
4. Labourers who build or maintain the garden make living wages, have health insurance and they are credited for their work.
5. The client is involved in some part of the physical build of the garden.
6. The property owner is ideally the gardener.
7. 70% of new planting is endemic or edible. Non-invasive species are allowed but should be competitive with the native species in their water use within a couple years.
8. No permanent mechanical irrigation system except for hand watering.
9. No chemicals or non-organic herbicides can be used in either the construction or ongoing maintenance of the garden.
10. All natural materials in the garden e.g. wood, gravel, soil and stone - are local or reused. Aim to keep within a 100 mile radius or at least similar ecosystems.

11. Land acknowledgement to the native peoples who previously tended the land must exist in the garden and an appropriate land tax will be paid by the property owner to the Indigenous tribe that previously tended the land.
12. No filter or weed fabric.
13. No leaf blowers are allowed in the maintenance of the garden.
14. There is no fixed, regular lighting system in the garden. (Exception for public spaces).
15. All green waste stays on site.
16. The absolution minimum of concrete needed to rightly build the project is what is allowed.
17. Designer of a project lives reasonably locally. When this is not possible, local knowledge and expertise should be deeply relied on in an honest, collaborative way.

Figure 16. Private residence, Terremoto - Los Angeles, CA.

Valuing the construction process

Construction should be a co-working process and the evolution of how a site is constructed should be promoted in the industry. As an industry, we have an architectural focus on showcasing the glossy finished image with the ribbon cut. However these landscapes are created with so many intricate layers that go unnoticed. This process is messy yet beautiful and involves more than just the landscape architect.

From the crisp printed documentation package, the project takes on its next step of evolution as it transforms into a reality. This process is never straightforward and this is where the beauty of our industry takes place.The involvement of onsite skilled staff is what brings these drawings to life.

Figure 17. Private residence construction, Terremoto - Los Angeles, CA.

Figure 18. Streetscape construction - New York.

Figure 19. Streetscape construction - Marrakesh.

SKILL 03 - LAND STEWARDSHIP + MANAGEMENT

Responding to the land

From research and discussions there is a growing push for the role of landscape architects to focus more towards land care and management and not only the development of new, high-end bespoke spaces. There is a shift in thinking in the role the industry can play towards responding to the native environment.

Visiting Yosemite National Park, demonstrated how a beautiful natural environment can become rapidly degraded through high visitation use. Lawrence Halpin's work undertaken at the Yosemite Falls Corridor showed effective techniques of designing an environment that is connected so well with the land it almost goes unnoticed. Through the careful selection of materials and their uses, the configuration of spaces and lightly touching the existing landscape, he achieves an outcome that is successful in managing large influxes of people to a national park.

Test Plot, a pilot project undertaken by Terremoto demonstrated simple moves that can be applied to public green spaces to reinstate native vegetation and gain community stewardship. Through involvement by the local community to manage and maintain small plots, it identifies how public green spaces can be rehabilitated to their native state and have strong community support.

Figure 20. Yosemite Falls Corridor, Lawrence Halpin - Yosemite, CA

Figure 21. Test Plot, Terremoto - Los Angeles, CA.

From design and construction through to long term management

Various landscapes are over-designed and unable to be managed sustainably. There is a shift needed towards less is more. We need further focus towards land stewardship and how we manage these spaces. In order to create resilient, enduring spaces, they need to be managed beyond the pretty architectural images and the opening ceremony.

Public

High profile public spaces visited particularly in New York, were run as small organisations that consisted of a digital platform for events and information, a community component, onsite staff for information and full-time maintenance staff. This model demonstrated how key parks create an identity and a community hub for local users.

Critically these large-scale spaces must identify the level of management anticipated at the preliminary design stages. Sites visited such as those in New York, required years of planning and design work to ensure these parks and green spaces could be continually managed.

Private

Private gardens visited varied in management. The highly manicured gardens of Morocco all involved full-time staff to maintain the gardens. While in California, firms like Terremoto are pushing for clients to take ownership of their gardens and take on the role of land care.

They aim to focus less on the way of making our gardens and focusing more on how we interact with the land and care for it.

Education

From discussions with practising professionals it was also evident that there is a lack of education relating to land management post-construction. It was identified that many graduate students do not have an understanding of what is required to maintain a landscape beyond its project completion.

Figure 22. Le Jardin Majorelle, Marrakesh, Morocco

Figure 23. Sunnylands Estate, James Burnett - Palm Springs, CA

5. Personal, Professional And Industry Impact

Personal Impacts

The Fellow has expanded his knowledge and pursued the progression of his work with the aspiration to contribute to the broader industry in meaningful ways. The Fellow has been inspired by the sites studied internationally, the conversations and professionals with whom the Fellow met, and the overall collation of findings from the Fellowship.

This Fellowship has enabled the Fellow to explore outside of Australia and be challenged on how he can approach and enhance landscape architecture. Through these investigations he has benefited personally in the following ways:

Inspiration

With the ability to visit, review and learn in person about significant landscapes internationally, he has gained motivation and inspiration on returning to Adelaide and is able to apply and share these experiences and findings.

Through meeting with numerous industry professionals, he gained an appreciation for the broader landscape industry and the sense of community through the exchange of information, knowledge and values towards how the landscape profession can progress into the future.

Awareness

His perspective on how the profession can be approached in new ways has made him more aware of the potential within the Australian industry. Through visiting a series of different countries, he has been able to broaden his awareness on how the landscape profession is being approached and the influence different cultures, cities and environments have. From understanding how landscapes are constructed and maintained in Morocco through to the use of bespoke stone marble seating in New York city, he has developed an international understanding and awareness of the profession.

Industry Confidence

Through the experience and knowledge gained, further confidence has been built on his ability to conduct independent research and reach out to an international audience to meet and discuss with industry professionals. Through undertaking this research, he has also built confidence and support on how the landscape profession can evolve into the future.

Professional

At the professional level, the Fellowship has provided the opportunity for the Fellow to immerse himself in international practice. He can bring to the profession new perspectives and skills applicable to South Australia on various scales. These findings challenge and test the thinking for landscape architects within Australia and in particular South Australia. These findings bring the following benefits and impacts:

Professional Network

Through the ability to meet and discuss with like-minded professionals internationally, he has been able to broaden and grow his professional network. He has created new connections that can be maintained beyond this Fellowship and continue to provide assistance with his career progression. From his time in Morocco on the Mediterranean Garden Society (MGS) tour, he was one of 80 members present and experienced four days meeting and connecting with like-minded individuals from across the world. Through the connections made, they broadened his network and assisted with his further overseas study locations. Returning home, the Fellow will continue his involvement in the MGS through the South Australian branch and be involved in future events, in particular the 2024 South Australian Tour.

Following the MGS tour, the Fellow continued developing his international network, meeting with professionals in London, New York and across California.The connections made will be continued with a mutual interest shared in each other's works, allowing future exchange of professional knowledge into the future.

The Fellowships will also enable the Fellow to continue broadening his local professional network, as he begins to share and discuss the Fellowship experience and the skills gained. He aims to strengthen and gain new connections within the landscape profession, and also diversify into a new and engaging network which is beyond just landscape architecture.

Skill + Knowledge Enhancement

He has gained skills on plant knowledge for dry, arid and mediterranean climates, innovative approaches to using local materials and working with skilled craftspeople.

The knowledge and skills that have been gained are now being applied and shared on a regular basis through his workplace.

Through active and new projects, he has begun exploring and testing these skills in how they can be applied to all types of projects from strategic reports through to detailed design. Alongside his own projects he is also sharing this knowledge with colleagues to assist applying to other active projects within the studio. Through this sharing it has prompted further discussions and workshopping on how they design and collaborate as an office.

Techniques

The Fellowship exposed the Fellow to new techniques, the impact of this exposure has led to the Fellow developing his working methods and approaches which will impact his professional projects. These new techniques challenge ways of thinking and provide alternative perspectives on how we can better ourselves as landscape architects, both individually and as a profession.

Digital Blog Platform

An online blog has allowed the Fellow to keep a visual record of all sites visited during the overseas research component, thus providing a readily accessible snapshot summary. Progressing forward this blog will continue to be used for sharing with professionals to provide a summary and insight into the Fellowship journey and findings captured.

Testing

The Fellow will commence investigating materials and plant species sourced overseas and their availability to Australia. Plant species that can be sourced will be planted and trialled to check their suitability to the South Australian climate. Material and plant testing will continue in ongoing projects at Oxigen, through the Fellow himself and other staff. The impact of this testing will lead to longer term design principles and approaches for both the office and the Fellow and can then be applied as standard practice to all applicable projects.

Industry

Within the Australian industry, there is a lack of exchange in knowledge and ideas through a first-hand method, particularly knowledge that has been gained internationally. The Fellowship has provided the Fellow with the opportunity to be immersed in these areas directly, rather than through a digital platform and to now share these learnings with the broader industry. These findings bring the following benefits and impacts:

Advocacy

The Fellow will continue to advocate for further development and refinement of the recommendations and considerations raised within the Fellowship. He will continue to apply these in his current workplace at Oxigen, and advocate to the broader industry and public.

Sharing of knowledge

Presentations to the Oxigen office, sharing knowledge on specific landscape techniques, in particular:

- Understanding of planting styles in Mediterranean, dry and arid climates and their application to South Australia.
- Techniques for use of local materials, labour and crafts.

Emerging Professionals

Engage with emerging professionals through presentations at the University of Adelaide and/or through industry mentoring programs. This will assist in broadening perspectives on landscape architecture to students and graduates and raise the standard and quality of what is being produced.

Digital and Printed Media

The online blog and social media platforms have been a successful means of raising awareness and communicating the Fellowship experience and summarising findings. These platforms will continue to be used for further advocacy of recommendations and considerations for the industry.

To accompany the digital platforms, this content will be transferred to a journal publication that summarises the Fellow's journey and the outcomes.

Exhibition

The Fellow aims to host a photographic exhibition to the industry and public that will show the outcomes from the Fellowship through an engaging platform. The exhibition will be accompanied by the journal publication to provide an overall summary. The exhibition aims to stimulate a new layer of thinking within the industry that will begin to prompt further discussions and approaches between professionals.

6. Recommendations and Considerations

From the range of sites, spaces and organisations visited a list of recommendations and considerations can be used and applied by landscape architects and designers to create more resilient and enduring spaces that are suitable to South Australia's climate.

Considerations and recommendations are listed in point form with respect to each skill enhancement area.

Mediterranean, dry and arid gardens

With South Australia's climate there are approaches and techniques we can learn from various regions overseas with similar climates. The application of these will require testing and monitoring, however our way of thinking and designing spaces can begin to shift. The following principles can be applied:

- Planting selections should where possible be 70% native to the region. 30% can be non-invasive species, however should be competitive with the native species in their water use within a couple years.
- Minimise use of irrigation, where achievable hand watering should be used (small scale / private gardens).
- Irrigated lawns should be minimised and alternative low maintenance and low water consumption varieties selected.

Vernacular Design and Adaptation

Within Australia we have a growing number of brownfield and greenfield sites that have great opportunities for adaptive reuse and co-existing spaces. Considerations should be made towards the following:

- Existing elements should be retained where possible, to be integrated and co-exist with the new works.
- Existing non-invasive plants of significance should stay (if in good health).
- Use of local materials - e.g. wood, gravel, soil and stone - are local or reused with an aim for all materials to be sourced within a 250 km radius.
- No chemicals or non-organic herbicides be used in either the construction or ongoing maintenance.
- Land acknowledgement to the Indigenous peoples who previously tended the land must exist.
- No filter or weed fabric.

- Minimise the use of concrete to high use areas only.
- The designer of the project lives reasonably locally. When this is not achievable, local knowledge and expertise should be relied on in a collaborative way.
- Design for robustness and long term, with the selection of durable materials and elements.
- Allow for flexibility during construction, through collaborating with contractors to achieve the best outcomes.

Land Stewardship + Management

As the landscape architectural industry continues to grow within Australia, and greater focus is placed on our open spaces, there is growing importance on how these spaces are future proofed and managed. The following considerations can be made:

- Ensure public spaces have community ownership at the commencement of the project through to construction and ongoing management and maintenance.
- In private gardens, ensure the client is involved in some part of the physical build of the garden.
- In private gardens, the property owner should be the gardener and be willing to take on management and maintenance of the space.

The following is a list of dissemination methods following the Fellowship:

Short

- The skills and techniques gained from the Fellowship will be applied on a daily basis in the workplace, from liaising with clients, local governments, internally with colleagues and other consultants.
- Public lectures on the Fellowship outcomes to be given at the University of Adelaide, to educate students and also raise awareness of the landscape profession and what is being undertaken internationally.
- A public exhibition showcasing the Fellows experience and findings. The exhibition will be used as a platform to advocate his considerations and recommendations to the landscape profession and also to the broader industry and community.
- Production of a short journal from the trip with captions relating to design principles discovered. This will be released in conjunction with the future exhibition.
- A media release to architectural media publications with an article written by the Fellow outlining the Fellowship's findings with considerations.

Medium

- The Fellow will meet with the University of Adelaide program coordinators / professors to discuss incorporation of Fellowship recommendations within the landscape architecture course.
- The Fellow will be further involved with the landscape architecture course through the University of Adelaide. Opportunities will be investigated to coordinate an On-shore Studio that focuses on South Australia's natural landscapes and how students can design spaces to suit these climates.
- Through the SAILA fresh program (AILA Student body), the Fellow will be involved in the annual mentorship program to assist emerging professionals and provide insight into his experience and findings.

Long

- The Fellow will continue to be an advocate for the recommendations of the Fellowship and be involved in the AILA on a state and national level.
- The Fellow will continue specialising in landscapes climatically suitable to South Australia's climate and be active in promoting this skill set and knowledge within the industry and the broader community.
- Consult and assist local governments on incorporating and implementing recommendations from the Fellowship.
- Use the Fellowship Report and journal developed to continue broadening the exposure of landscape architecture to the public and its importance in South Australia, specifically regarding changing climates. This will also assist the Fellow advocating for the importance of landscape architecture and its role within the broader architectural industry.

7. Conclusion

The George Alexander Fellowship has had a strong impact on the Fellow, enabling him to explore outside of Australia and be challenged on how he can approach and enhance the profession, to offer him a new perspective and outlook on the industry.

He has investigated the specific techniques and approaches being used internationally that are enhancing and redefining how landscape architects respond to our changing climates. With a focus towards similar South Australian climate zones overseas, particularly the Mediterranean and California, he gained insight and an understanding of emerging strategies to create resilient spaces that align with South Australia's climate.

The Fellow has gained a valuable understanding of techniques applicable to: dry and arid planting palettes, adaptive reuse, and land stewardship / management. These findings bring a new layer of thinking to the Australian industry, prompting further discussions, inspiration and applicable techniques and principles for landscape architects to pursue further in the design of our spaces.

Overall, the Fellow has gained further appreciation and understanding on where landscape architecture can be pushed. There is great opportunity particularly for emerging professionals on how we approach designing both private and public spaces. The next step is finding the balance of meeting the needs of humans and the natural environment.

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The International Specialised Skills Institute
1/189 Faraday Street, Carlton VIC 3053
Ph: 03 9347 4583
www.issinstitute.org.au