



WHAT IF? WHAT NEXT?

SPECULATIONS ON HISTORY'S FUTURES

SESSION 3A

COUNTERING THE CANON/S

**Living Cultures: Recovering Indigenous
Narratives in Architectural History**

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RECONCILING AUSTRALIAN ABORIGINAL ARCHITECTURE: A BUILT-UNBUILT DILEMMA OF THE ANTHROPOCENE

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Building an interconnected relatedness to Country is an opportunity to rethink Australian Indigenous architecture beyond Western perceptions of built or unbuilt. Indigenous ontologies are relational whereby a Country is seen as a living body, and thus everything is intricately entangled with respect, reciprocity, spirituality, and relatedness. The “Learning on Country” project (a collaborative program between South Australian Ngarrindjeri Aboriginal peoples and students of Masters of Sustainable Design at the University of South Australia) has shown that Ngarrindjeri ontology (or epistemology) is embedded in Ngarrindjeri Ruwe (Country) where land, waters, peoples, and all living things are interconnected. Moreover, Aboriginal architecture thus can be seen as neither an inert built object nor an unbuilt process, but is rather a significant relationality of living Country.

Considering the perceptions above, the paper identifies five fundamental discourses of Australian Indigenous architecture: Aboriginal architecture, architectural anthropology, human-environment relationships, concepts of place, and culturally appropriate design, and these are investigated through the lens of Ngarrindjeri relational ontology. While articulating an Indigenous architectural knowledge, the above discourses indicate a product-process dilemma of whether Indigenous peoples had a building culture or not, and the developing of multidisciplinary methodologies to gain an understanding of Indigenous self-constructed shelters, camps, villages, and places. However, mainstream architectural knowledges fundamentally provide an understanding of Western ontologies, epistemologies, and methodologies, which may impact Indigenous relational ways of being, knowing, and doing. Hence, the paper suggests building a respectful relatedness to Indigenous Country, communities, peoples, and all entities, as relational ways of addressing, interpreting, and documenting Indigenous architectural knowledges beyond built or unbuilt standpoints.

Introduction

Engaging with Ngarrindjeri peoples and the beginning of an understanding of “Country” is an opportunity to recognize Australian Indigenous architecture as relational knowledges and to move beyond thinking of architecture as perceptions of built material or unbuilt process.¹ In Aboriginal English, “Country” means beyond a geographical land or region, but rather a living body (Land) whereby everything is interconnected.² In 2013, a *Yuntuwarrun*: “Learning on Country” project was undertaken collaboratively within Ngarrindjeri peoples and students of the Masters of Sustainable Design at the University of South Australia (UniSA).³ *Yuntuwarrun* is a Ngarrindjeri term which means “coming together to learn” and thus aims to establish a respectful relationship with Ngarrindjeri Country (Land) and peoples and provides a primary understanding of a reciprocal relationality to Country.⁴ The project is continuing through an ongoing PhD research in UniSA in collaboration with Raukkan Ngarrindjeri Community Council Inc., and with a proposed title of “Unfolding invisible architecture: A case study of Raukkan Ngarrindjeri community, South Australia”. Ngarrindjeri peoples have been living around the lower Murray River, Coorong, and Lakes area of South Australia for thousands of years. As custodians, they occupied, enjoyed, and managed the natural resources of Ngarrindjeri Country and lived in many different clans (*Lakliyerar*). The Raukkan community was developed as a Mission by the “Friends of the Aborigines” in 1858 and while space, place, and other built-environments have changed, the community continues to largely resemble Western concepts of architectural form, space, and order.⁵ While at present Ngarrindjeri peoples live in various locations in South Australia, the Raukkan Community is more than a dwelling place and land-based notion of home, but rather it is a heartland and important meeting place for Ngarrindjeri *Lakliyerar*.

The central ideas of this paper developed while involved in the “Learning on Country” program and are based on Ngarrindjeri relational ontologies, epistemologies, and methodologies. The learning suggests that Australian Indigenous architecture is neither built-unbuilt, nor an ecologically and culturally constructed artifact, but rather an interconnected relationality to Country. Hence, the paper argues that Western ways of understanding, acquiring, and implementing Indigenous architectural knowledges largely as material, concept, or processes and may impact Indigenous relatedness to Country. Nevertheless, to understand, document and interpret Indigenous architecture, it is necessary to adopt relational ways of being, knowing, and doing in gaining Indigenous knowledges. Thus, the paper focuses on Ngarrindjeri *Ruwi* (Ngarrindjeri Country) in order to develop a relational paradigm of Indigenous architecture. *Ruwi* is the center of Ngarrindjeri relational knowledges and is embedded in the Ngarrindjeri *Ruwar* (*Ruwar* is translated as the body, spirit, lands, and waters, and that all living things are interconnected).⁶ In the Indigenous paradigm, knowledge is relational and not an individual entity, but rather, it is shared with all interconnected entities and cannot be documented individually.⁷

Moreover, based on an interconnected relationality, this paper develops an inquiry-based position on Indigenous ways of being and knowing for reconciling Australian Indigenous architecture and identifies the following dilemmas:

- whether Indigenous peoples had building culture or not;
- should Indigenous architecture be investigated either as material or process;
- could anthropological, biological, ecological, psychological, sociological, or other fields provide appropriate theories, tools, and techniques for architectural research.

Considering the built-unbuilt perceptions above, the paper has identified five discourses: Aboriginal architecture, Architectural anthropology, Human-environment relationships, Concepts of place, and Culturally appropriate design, and are analysed through the lens of Ngarrindjeri interconnected relational onto-epistemology. The above discourses are found to be largely addressed as reconciliation of Australian Indigenous architecture – but is mainly developed based on Western ontologies and built upon the external, internal, and the socially constructed realities of architectural objects or phenomena. Importantly, the paper also proposes an alternative to the ongoing dogmatic ideas of built-unbuilt architecture, articulates Indigenous architecture as relational knowledges, and shared with all interconnected entities of Country.

The Built and Unbuilt Dilemma

Investigating and analysing various entities of human and natural built environments and their causal relations are fundamental ways of acquiring, documenting, and producing architectural knowledges. Moreover, Western ways of architecture are likely to be interested in diverse realities of human built environments and highlights its functional, cultural, ecological, spiritual, and symbolic meanings and relationships. For example, architectural research is essentially involved in the development of methodologies to study three-dimensional built objects, spaces, places, and associated sociological and ecological processes. Consequently, it becomes necessary to merge with various disciplines such as: anthropology, ecology, ethnology, geography, psychology, and sociology while adopting theories and techniques relating to architectural objects and processes. Multidisciplinary approaches such as “architectural anthropology”, “architectural psychology”, “environmental psychology”, “environment-behaviour”, “human-environment studies”, and “people-environment relations” studies have developed largely to unfold and produce Indigenous architectural knowledges.⁸ As architecture merged with anthropology, this evolved new field architectural anthropology, and primarily claimed that “architectural space must be understood as a concrete space, not an abstract one”.⁹ This field also accepts architectural space as concrete object as well as social and ecological processes. Hence, the contribution of architectural anthropology in Indigenous architecture similarly highlighted material-process from a built-unbuilt perspective.

Indigenous architectural reconciliation began around 1970s, with the documentation of traditional shelters, cultural artefacts, and settings of an Indigenous place by professionals who were not trained in architecture.¹⁰ This reconciliation spirit also inspired non-Indigenous architects to unfold and develop an Indigenous architecture. This was difficult as they did not have methodologies suitable for architectural studies, however training in appropriate theories, tools and techniques were developed later.¹¹ Initial studies of Indigenous architecture considered self-constructed shelters as less informative for architectural analysis.¹² Alternatively, studies of Indigenous geographical place and its physical, cognitive (sacred) and cultural environmental behaviours were also emerging and subsequently developing a built-unbuilt dilemma.¹³

Some indigenous scholars have also argued that colonialism conceived Aboriginal Country as inert geographical land, and this became potential for scientists and researchers to identify valuable natural resources. In similar ways indigeneity became an important research subject for ethnographers, anthropologists, archaeologists, educators, and psychologists.¹⁴ Nevertheless, in order to decolonize Western ways of research in Indigenous contexts as research subject, object, and processes, Indigenous scholars have developed research paradigms based on Indigenous relational ontology, epistemology, methodology, and axiology.¹⁵ These developing paradigms suggested that interconnected relationships among various entities of Indigenous Country (Land) must be “recognized, honoured, emphasized, and privileged” for any research in Indigenous contexts.¹⁶ Hence, the paper emphasizes the importance of being aligned with Indigenous interconnected relational ontologies, epistemologies and methodologies, while continuing to recognize architectural knowledges.

Relationality: Ngarrindjeri Interconnected Onto-epistemology

Given the above discussion, further development must begin with establishing respectful and reciprocal relationships to all entities of Country, privileging Indigenous voices, highlighting caring for Country, and the adoption of Indigenous ways of being, knowing, and doing.¹⁷ Moreover, Indigenous knowledges are relational and shared with all creations rather than just to be documented and gained as subject or object only for human purpose.¹⁸ The paper also highlights an Ngarrindjeri relational ontology and epistemology as the basis for ways of thinking about the natural world in addressing Indigenous architectural knowledges.

In order to also decolonize Western ways of producing Indigenous knowledges, Indigenous research paradigms have been largely developed using four interconnecting entities as ontology

(study of the nature of reality), epistemology (nature of thinking), methodology (how knowledge is gained), and axiology (ethics of knowledge), but their centre is relationality.¹⁹ Indigenous scholar Shawn Wilson indicates that, in Indigenous ontologies, an object may have one reality (known truth), but also have sets of relationships between knower (investigator) and entity (object).²⁰ He also indicates that, in constructivist ontologies, an individual entity may have multiple external, internal, and socially constructed realities, but in Indigenous ontologies relationships between the knower and reality are more important than the entity and the reality itself.²¹ Wilson further states, “the reality is not an object but a process of relationships, and an Indigenous ontology is actually the equivalent of an Indigenous epistemology”.²² Thus, relationships are more important than the reality of an object that we observe or perceive externally. Again, in Western relational ontologies, relation between entities are ontologically more significant than the entities themselves.²³ However, Western philosophers are always puzzled about identifying various relations between entities, and thus give more attention to investigate diverse causal relations, and provide equal attention to the realities.²⁴ On the other hand, Indigenous researchers highlight the processes of interconnected and axiological relations between entities and in accordance with this, interconnected relationality is more important than the individual investigator, reality, entity, and a causal relation.²⁵

Indigenous Land (Country) is not inert, but rather living, where all entities are intricately entangled with each other and these relationships cannot be defined by a definite cause or boundary.²⁶ Thus, Ngarrindjeri peoples largely believe in non-anthropocentric relationships to all interconnected human and non-human entities of the Land. While there are many other examples, Ngarrindjeri relationality expresses a deep interconnectivity to all life forms such as land, waters, animals, and human participants, and also defines the existence and wellbeing.²⁷ However, they are concerned about the continuing natural resource extractions may destroy Ngarrindjeri relationships to Country as illustrated in the *Yarluwar-Ruwe (Sea Country) Plan*:

The land and waters is a living body.
We the Ngarrindjeri people are a part of its existence.
The land and waters must be healthy for the Ngarrindjeri people to be healthy.
We are hurting for our Country.
The Land is dying, the River is dying, the Kurangk (Coorong) is dying
and the Murray Mouth is closing.
What does the future hold for us?²⁸

For example, and as indicated in the above Ngarrindjeri interactions with the natural world, weaving is more than a process of producing Ngarrindjeri artefacts, but rather a part of their interconnected living Land. As Ngarrindjeri Elder and weaver Auntie Ellen Trevorrow states:

Stitch by stitch,
Circle by circle,
Weaving is like the creation of life,
All things are connected.²⁹

However, the weavers are worried because wetlands are drying out where the rushes for weaving are growing.³⁰ Hence, Ngarrindjeri peoples invite all Aboriginal and non-Aboriginal peoples to listen and work together to monitor the whole interconnectedness of the Country and protect it from the continuing injuries by the human-world.³¹ In this way, Ngarrindjeri peoples are raising their voices against the present conceptualization of the non-human world, and that humans of the current Anthropocene must take care of Land as a vital interconnecting part of both the human and non-human world.

The following five discourses have contributed extensively to the production of Australian Indigenous architectural knowledges and are briefly discussed through the lens of Ngarrindjeri relationalities or interconnected onto-epistemologies.

Aboriginal Architecture

The development of an Aboriginal architecture has given a professional orientation to Australian Indigenous architecture. For example, architect and anthropologist Paul Memmott along with the researchers of Aboriginal Environments Research Centre (AERC) at the University of Queensland developed it as an “ethno-architecture” approach. This was largely defined by Memmott as “created and built by Indigenous people, adjusted as required to suit their own changing needs, and supportive of their own social organization, belief and lifestyle, all done by themselves using their own technologies, labour and skills, and the redrawing of the traditions of pre-contact (or classical) Indigenous architecture”.³² Consequently, he documented 200 typologies of camps, shelters, and villages of various Indigenous language groups and these were published in the book *Gunyah, Goondie and Wurley: The Aboriginal Architecture of Australia*.³³ However, he clearly defined those typologies as Aboriginal architecture “by, for, and about Indigenous peoples, places and concepts” and which have been rejected as it is largely utilized by non-Indigenous architecture industries.³⁴ Nevertheless, this paper suggests that in developing an Ngarrindjeri onto-epistemology, Aboriginal architectural knowledges can be articulated, documented, and shared relationally as an interconnected part of ‘living Country’, rather than just seen as a humancentric subject/object from etic perspectives of an observer and emic, or deep anthropological perspectives of Indigenous peoples.

Architectural Anthropology

Before architecture had its own tools to study cultural materials and the processes of Australian Indigenous settlements, theories and techniques of anthropology have been popular and the paradigm of architectural anthropology emerged.³⁵ In this developing field of architectural anthropology, Indigenous Australian cultures had been largely ignored internationally and subsequently researchers of the AERC developed an “Australian form of architectural anthropology”.³⁶ This employed various theories of ethnology, ethology, anthropology, psychology and social sciences, and utilized ethnographic techniques in order to investigate the social, behavioural, and ritual people-environmental relations of an Indigenous place.³⁷ AERC also introduced cognitive anthropology and ethnosciences to investigate Indigeneity and the cultural settings of remote Aboriginal places and later applied some of these principles in the development of culturally appropriate Indigenous housing.³⁸

The key objectives of an architectural anthropology is to systematically investigate and document culturally specific architectural artefacts, while providing an understanding of the fundamental realities and relations of style, function and typology of socio-culture.³⁹ Therefore, it may be argued that architectural anthropological research developed from Western constructivist ontologies as it focuses more on socially constructed attributes and knowledges. While many of the various aspects of these earlier understandings and discussion were thoughtful and continued to develop diverse and interesting ideas, the ongoing PhD research in collaboration with the Raukkan community aims to unfold an onto-epistemological interconnectedness of Ngarrindjeri peoples and Country. For example, in the pre-consultation processes of the PhD research, it had been suggested to focus mainly on various interconnected relations between entities of the Raukkan Community rather than investigating and articulating Ngarrindjeri architecture as cultural and ecological objects or processes.

Human-Environment Relationships

Indigenous peoples spent more time within natural settings, but less in permanent shelter has been an assumption because of their nomadic ways of living style. Amos Rapoport published the paper, *Australian aborigines and the definition of place* in 1972, and claimed that Indigenous Australian peoples might live in a self-constructed permanent building only for weather protection. However, he ignored built environments as a way to manifest the cultural and symbolic meanings of architecture.⁴⁰ He consequently argued that Indigenous Australian peoples were “able to establish a sense of place which was independent of any buildings which they might have constructed”.⁴¹ Therefore, he provided the following breakthrough statement:

Australian Aborigines build relatively little - the visible built environment appears insignificant. Yet they have a most complex culture and an extremely rich and complex cognitive environment. They live in an 'invisible landscape in the head' which is overlaid, as it were, over the natural visible landscape, overlapping, coinciding and being congruent with it at certain visible features. In this way the apparent barren and empty natural landscape is transformed cognitively, becoming endowed with extraordinary meaning, given great temporal depth and being humanised. None of this is visible to the outside (European) observer for whom there is nothing there.⁴²

Rapoport also rejected the idea that an architectural anthropology is limited to an architectural analysis of culturally imbued built forms. Alternatively, he proposed to highlight Indigenous peoples' cognitive relations with their surrounding natural environments.⁴³

While Rapoport largely ignored the social, physical, and symbolic properties of built-environments of an Aboriginal place, Paul Memmott and AERC researchers developed a "transactional people-environment model" by integrating both physical and cognitive environmental properties of place.⁴⁴ From Western relational ontologies, it can be assumed that in human-environmental relations, environment is split into two separate entities of human built and natural built, and importantly this considers human's all causal (cognitive and physical) relationships. However, in Ngarrindjeri relational onto-epistemology, environments and humans are intercommoned parts of living Country, and illustrated in the *Yarluwar-Ruwe (Sea Country) Plan* as:

Our Lands, Our Waters, Our People, All Living Things are connected. We implore people to respect our Ruwe (Country) as it was created in the Kaldowinyeri (the Creation). We long for sparkling, clean waters, healthy land and people and all living things. We long for the Yarluwar-Ruwe (Sea Country) of our ancestors. Our vision is all people Caring, Sharing, Knowing and Respecting the lands, the waters and all living things.⁴⁵

Concepts of Place

Though Indigenous self-constructed shelters were ignored earlier, concepts of place such as place attachment, place meaning, and place identity have contributed strongly to architectural analysis. For example, Amos Rapoport claimed Indigenous place as sacred and established cognitively through coinciding mythical and physical structures of natural landscapes.⁴⁶ Memmott developed a model of place by integrating physical, sociocultural, and emotional properties at the end of 1970s which principally focused on various causative relations between people and environment.⁴⁷ These initial studies by Rapoport, Memmott, AERC, and others, articulated Indigenous place as cultural-ecological material and process, and further utilized this in architectural interventions of remote Indigenous places. Indigenous concepts of Country have also been recently recognized and valued as significant concepts of place, and are translated into the creation of contemporary Indigenous urban places.⁴⁸ Thus, place concepts are fundamentally determined as affective bindings to a physical place and can be widely utilized as an essence of architectural design concept and the creation of contemporary human place.⁴⁹ Though Indigenous spiritual, emotional, and physical bonding to Country is relationally intertwined with all interconnected entities, Indigenous place concepts, however may not be conceptually or materially transferable. For example, Raukkan is largely valued as a traditional Ngarrindjeri meeting place where all Ngarrindjeri human and non-human entities from the past and present have lived successfully for thousands of years.

Culturally Appropriate Design

Three paradigms of "cultural design, environmental health, and housing as processes" have contributed to design and delivered culturally appropriate housings for Australian Aboriginal and Torres Strait Islander peoples.⁵⁰ The "cultural design" paradigm also uses an anthropological approach to collect cultural behavioural data from Indigenous dwelling places and translate it into the housing design context.⁵¹ The "environmental health design" paradigm has aimed to increase domiciliary health and sanitation quality and is widely known as "Fixing Housing for Better Health (FHBH)", but is criticized because Indigenous ways of health and sanitation were ignored in design

processes.⁵² The third paradigm, “housing as a process model” is divided into the stages of “project development”, the “establishment of community relationships”, a “determination of design issues”, and aims to minimize the gaps among design process, user, and product.⁵³ Regardless of success or failure, the above design paradigms have been developed to satisfy Indigenous cultural needs, wants and relationships, thus can be seen as “user-centred” and “product-oriented”.⁵⁴

Beyond Built and Unbuilt

Without an understanding of an Indigenous relationality, as well as becoming an interconnected part of an Indigenous Country, it would be difficult to move away from thinking of architecture as built object and unbuilt process discussed in most of the above discourses. For example, visiting Ngarrindjeri Country can provide an effective ability for UniSA students to study and understand something of the diverse realities and causal relationships of architectural built environments at Raukkan Aboriginal community. When the students first visited Raukkan Community, the colonial buildings and contemporary dwellings were largely visible, but discussion with Elders (custodians of knowledges) has helped to unfold Ngarrindjeri architecture as relational knowledges. A key aspect of this project was to engage the students in Ngarrindjeri relational ways of being, knowing, and doing, and as Ngarrindjeri Elder, Uncle Clyde Rigney noted, “we don’t want the University to do things for us but work with us”.⁵⁵ In collaboration with the community Elders, the learning of Ngarrindjeri relationality has continued through discovering – how the Raukkan community is historically, spiritually, and functionally connected to the Coorong and ‘Lake Alexandrina’.⁵⁶ Thus, The “Learning on Country” project has contributed towards the development of a unique relational approach to unfold Ngarrindjeri invisible architecture.⁵⁷

Ngarrindjeri Land is a unique Country of water-land harmony and provides a unique reciprocal, respectful, and spiritual bonding among all entities. However, Ngarrindjeri spiritual connections to Land are continuously being impacted by human construction culture throughout post-colonization period, even after the reconciliation started. For example, Ngarrindjeri peoples were not able to protect the sacred Land *Kumarangk* from the construction of a connecting bridge between *Kumarangk* and Goolwa, South Australia.⁵⁸ *Kumarangk* is not just an Island, it is sacred, and spiritually belongs to the Ngarrindjeri *Miminar* (Ngarrindjeri women). The Ngarrindjeri word *Kumarangk* means the place for pregnancy, and birth.⁵⁹ In order to protect Ngarrindjeri Country, culture, and spirituality, The *Kungun Ngarrindjeri Yunnan* (Listen to Ngarrindjeri Speaking) is a consultation and negotiation agreement between Alexandrina Council and South Australia, signed in 2002.⁶⁰ This agreement highlighted Ngarrindjeri laws, cultures, traditions, and spiritual connections to Country and ensured that all relationalities must be respected, acknowledged, and monitored with further human development on any part of Ngarrindjeri Land.⁶¹ In order to protect Ngarrindjeri Country, the contemporary governing body of “Ngarrindjeri Regional Authority” (NRA) was formed in 2007.⁶² In the same year, the Ngarrindjeri *Yarluwar-Ruwe* (*Sea Country*) *Plan* was published, which illustrates the traditional philosophy of interconnectedness associated with the *Ruwe/Ruwar* (The land and waters is a living body.....).⁶³ In 2014, Ngarrindjeri peoples further developed a *Yannarumi* (Speaking as Country), which clearly expresses the Ngarrindjeri onto-epistemology that underlies in the deep interconnectedness of *Ruwe/Ruwar* and defines how Ngarrindjeri Nation can ensure the health and wellbeing of all Ngarrindjeri entities.⁶⁴ The PhD research on Ngarrindjeri architecture, in collaboration with the Raukkan Community Council Inc. reflects the importance of the Ngarrindjeri *Yannarumi*, and aims to embrace Ngarrindjeri concerns, vision, and the goals to protect Ngarrindjeri *Ruwe*. The PhD research is continuing to work through the processes of Ngarrindjeri relational ways of being, knowing and doing. The research is also developing an approach of how Indigenous architectural knowledges can be acquired relationally and shared with all creations (including the Earth) for wellbeing of both peoples and Country.

Conclusion

As Indigenous peoples have been living successfully on Country for thousands of years, the building of relationality to Country is a significant understanding of Indigenous knowledges, and an important way to minimize the ongoing damage of the non-human world within the current Anthropocene. However, an understanding of Indigenous architectural knowledges is a challenging notion because it has been uncertain that Indigenous peoples developed building cultures and continued to live as part of a living Country. Considering this challenge, the “Learning on Country” project and the present PhD provides a unique research opportunity in collaboration with Ngarrindjeri communities to unfold a relational paradigm of Ngarrindjeri architecture. The discussions of five reconciling discourses through the lens of Ngarrindjeri interconnected onto-epistemology also provide new directions of thinking an Indigenous architecture beyond a product, process, or both. Therefore, Indigenous relational ways of knowing, being and doing offer significant possibilities for the development of a unique paradigmatic understanding of relational architecture.

Endnotes

¹ Some of the capitalizations are used in this paper to highlight Ngarrindjeri terms and Aboriginal English words such as Country, Land, and Elders.

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- ⁵¹ Go-Sam, "Design Paradigms."
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- ⁵³ Fien J., E. Charlesworth, G. Lee, D. Morris, D. Baker, and T. Grice, "Flexible Guidelines for the Design of Remote Indigenous Community Housing," *AHURI Positioning Paper* 98 (2007): 1-68.
- ⁵⁴ Lipon Saha, Ron Nicholls, Alpana Sivam, and Sadasivam Karuppannan, "Relationality: An Indigenous Approach to Housing Design" (9th State of Australian Cities Conference SOAC, 2019), 1-11, <https://apo.org.au/sites/default/files/resource-files/2019-12/apo-nid303872.pdf>.
- ⁵⁵ Nicholls and Tangikina, "Yuntuwarrun," 28.

⁵⁶ Lake Alexandrina is an estuarine lagoon of south-Eastern, South Australia which forms the Murray mouth.

⁵⁷ Nicholls and Tangikina, "Yuntuwarrun."

⁵⁸ Ngarrindjeri Land, "Caring for Country," in *Ngarrindjeri Lakun: Ngarrindjeri Weaving* (Progress Association, 2013): 16.

⁵⁹ Diane Bell, "The politics of Knowledge," in *Ngarrindjeri Wurruwarrin: A World that is, was, and will be* (Spinifex Press, 1998): 545

⁶⁰ Land, "Caring for Country," 16.

⁶¹ Land, "Caring for Country."

⁶² Bignall, Hemming and Rigney, "Three Ecosophies," 468.

⁶³ "Yarluwar-Ruwe," 5

⁶⁴ Bignall, Hemming and Rigney, "Three Ecosophies," 469-70.