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## **Threshold Country**

Annamaria Weldon

I'm drawn to country between wetlands and sea sand over limestone, like the shore where I left my other skin before I became estuarine...

'Many Rivers' dotdotdash Vol.4

Mandurah is country inscribed with the passage of water, sweet and salt, in drought or inundation, above ground, underground. Its tidal flow, inland from the West Australian coast through the Dawesville Channel, flushes Peel Inlet and Harvey Estuary where the Serpentine, Murray and Harvey rivers return to the ocean. The Peel-Harvey region is shaped by water's restless cursive, its tidal narrations of exile and arrival. Only at Yalgorup Lakes does water lie pooled and tideless, trapped between dunes, dreaming of the nearby sea it came from long ago.

The City of Mandurah is one of Australia's fastest growing regional centres. Transformed over the past thirty years, some of the fishing village ambience many remember from modest family holidays is now overshadowed by the high-rise real estate typical of baby boomers' seachange nirvanas. Famous for ocean and estuary beaches, boating and fishing, Mandurah is being re-landscaped for tourist complexes and canal homes.

But 30 kilometres south of the city, along the Old Coast Road, once its main link to Bunbury, is another world: Yalgorup National Park, a 13,000 hectare coastal strip of limestone and sand dunes, with Ramsar-listed wetlands nestled in their folds.<sup>1</sup> Here, salted scrub and stands of mallee give way to swamp paperbarks and peppermints. Remnant tuart forest is stranded between land and sea and timescales meet at the ecotone of Quindalup and Spearwood dunes. Here, land holds history the way lakes hold reflections on their surface, the way Lake Clifton holds fossils shaped like memories under its skin.

This country immerses you, wraps its stories round you, makes you care about them: the curlew sandpipers which fly here from Siberia; the long-necked turtles who labour to lay their eggs without falling prey to eagles or hawks; the hooded plovers whose chicks may not hatch, crushed in their shallow sand-scrapes on the lake shore; the ancient rock-like mounds, more than

two thousand years old, still growing at Lake Clifton though they have become remnant fossils in other lakes.

They are called thrombolites, lacustrine fossils formed by an accretion of residue from photosynthetic bacteria at their living edge. Like so much else in the wetlands, the active microorganisms are susceptible to alterations in habitat. Their story stands in counterpoint to the scale and pace of urban life and puts Mandurah's recent, rapid expansion in perspective: the thrombolites are at least two thousand years old and they grow just 0.1–1.0mm higher each year.<sup>2</sup>

This was not the story I planned to write. I was on my way to the South West's karri and granite country when I came across Yalgorup. And though it felt like love at first sight, I didn't trust my feelings: I was wary of getting involved with another place between land and sea which evoked too many features of the windswept, salt-encrusted limestone island I had left behind two decades earlier. The intervening years were spent trying to free my roots from their Mediterranean bedrock, 'becoming Australian'. But a hidden lake and the precarious living rocks at its heart drew me in. Getting to know them and telling the story has, in unexpected ways, finally taken me across that threshold, the one we don't know is there until the day we feel at home in a place.

Our stories of who we are all begin somewhere else.<sup>3</sup> Yalgorup country, too, won't forget where it came from: its land and water are heavy with the memory of sea. Ten lakes, some brackish and some saline, resulted from alternating ocean levels during this last interglacial period. As they rose and fell, water flowed inland and back. Gradually, as the coastal profile changed, spreading dunes sealed the outlets and trapped residual water. Aerial views of Yalgorup today show these lakes as a brilliant blue chain running north to south in three long strands, parallel to the coast. But at ground level, even bathed in the famous Western Australian light, Yalgorup's bushland, sand hills and lakes are enigmatic and unfathomable. It's a place of shorelines and sheltered habitats. Each ecotone evokes a litany of names for edge, those margins and thresholds where life must adapt to survive and grow. This is what the thrombolites have done at Lake Clifton.

They look like low circular columns broken off at the base, edges worn smooth and round by water and wind. Those in deepest water are conical and can reach over a metre in height, with girths to match. When exposed by falling lake levels due to summer evaporation, their surface becomes brittle as dry sponge. Each one is distinct, with cracks and whorls on its domed surface as individual as signs of age on a tree, or a human face. These remarkable rocks are so friable that before the lake's observation jetty was built, many were crushed by careless visitors. Complex communities of microscopic organisms are housed within their stony structures: they live like orders of anchorites, dependent on symbiotic relationships with each other and the walls growing around them.

The minute cyanobacteria are vulnerable to environmental shifts. Their photosynthetic process relies on freshwater springs which bubble up under them as they grow in the benthic mud and vital clear water. In a fossil removed for geological research, I saw the tiny canal which spring water had left in the core of a thrombolite after thousands of years<sup>4</sup>. The springs on Lake Clifton's Eastern shore are rich in calcium carbonate, from which the rocky precipitate, cemented by mucus-like secretions, is derived. Unlike coral, which actively grows its own exoskeleton, thrombolite mounds, also known as microbialites, are formed by a passive process, including chemical reaction with the brackish water around them. Each alteration to groundwater flow, nutrient concentrations, the lake's salinity or its rainfall-dependent winter inundation challenges their survival.

The thrombolites have lived here for thousands of years due to rare and successful adaptation: in summer they are almost totally exposed and in winter, when run-off and rain raise the water level, are fully submerged. Clifton's lake-bound microbialite reef is the largest in the southern hemisphere, extending over four square kilometres. Now its viability is threatened by encroaching development.

Often confused with stromatolites, thrombolites have 'clotted' internal structures, whereas stromatolites are layered. While these internal architectures are significant to geologists and scientists, as a writer on my first visit, it was the striking pattern they made along the shoreline which caught my attention. Summer was ending and the waterline had receded, exposing the reef. As far as I could see, for kilometres north and south along the edge of the blue lake, thousands of bone-white stones were arrayed like dots. I had never seen a landscape like it. My first impression was of a traditional Aboriginal dot painting and its encoded message. It was as though the thrombolites were forming sentences, strung from words of a lost dialect. I tried to listen, wanting to understand, but heard only the rhythmic lap of water against the pylons, a soughing wind in the sedges.

Residues of that first encounter have stayed with me. Studying the thrombolites has not dispelled a sense of their eloquent mystery. Even now, when the fossils closest to the observation

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jetty have become so familiar that I recognise each one's distinct markings, the memory lingers, like a half-lost language forgotten for lifetimes.

It is not forgotten by the Bindjareb Nyungar, this land's first people. They know that the thrombolites, which they call Woggaal Noorook, are eggs laid at Yalgorup in the Dreamtime by the female creation serpent as she travelled south from the Swan River. I was told this creation story by George Walley, a local leader and cultural teacher. George's help has been indispensable: this is his country and I acknowledge his people as its first owners. I write of Yalgorup with respect for Binjareb tradition. Learning this landscape like a second language, I found it vital to have guidance from those closest to it, threshold guardians who have opened the way.

Despite a very active Indigenous cultural presence in Mandurah, casual visitors do not find Yalgorup's heart so accessible. The park is not dramatic in quite the manner hurried tourists expect: its wildlife is recondite, seasonal or nocturnal; the low profile terrain, impenetrable bush and scrub-covered dunes are (in my experience at least) more likely to reveal their intricacies to those who return often, inclined to slip inside the quiet.

With just a few areas around the national park available for day-use or camping, it's not overtly recreational unless you are drawn to isolated tracks and meditative stretches of water. You have to climb up a ridge or steep park look-out to catch other views. Between dunes, you can see only as far as the nearest row of sandhills; in dense bush, only the trees and grasses of a single thicket; through a lakeside track's fringing trees, pieces of aqua water - an unmade jigsaw puzzle.

But to me the lakes are a book of hours in a library of dunes, with aquifers for archives. One story floats over another. These wetlands are a palimpsest of water writing, some layers visible, others unseen. No two lakes at Yalgorup share the same chemistry; each has its own distinct setting, flora and fauna. Elongated Lake Preston is closest to the coast. Behind the next ridge, lakes are grouped like little islands of an archipelago. Travelling north to south, they are Swan Pond, Duck Pond, Boundary Lake, Lake Pollard, Martins Tank Lake, Lake Yalgorup, Lake Hayward and Newnham Lake.

Nearest to the Old Coast Road is Lake Clifton, over 20k long. Its lakebed, inscribed with histories, lies silent and unread. The thrombolites are not the only memories it keeps under its surface; there is knowledge of early Bindjareb fishing traditions; the wounds of invasion, of exploration and massacre; long scars left by the Marl miners, who took its sand and mud to seal the roads of Perth; splinters of a mast, the remnants of a tragic afternoon in 1886 when the Herron children's sailing boat capsized, its mast stuck fast in benthic mud and only two of the four siblings on board eventually made it back to shore.

Every Australian landscape that matters has its lost children, the voices of myth and story whisper. But I suspect Yalgorup has foundlings, too. I spend so much time there just listening and watching, like a child being told stories. What is it that intrigued me from the beginning? Perhaps I've never grown out of my childhood attraction to strangeness: when I first saw this country, despite all that water it seemed calcified, cryptic and sclerophyllous. And yet, bore a dangerous resemblance to that other place where I once belonged - and left. But there was more, some notion its significance was at once personal and universal: I felt this terrain had something to tell me, something I needed to learn, about loss of country and recovering a sense of place.

To geographer Edward Relph, the human sense of place is a synaesthetic faculty which combines sight, hearing, smell, movement, touch, imagination, purpose and anticipation. <sup>5</sup> A complex sense evolved, perhaps, to compensate for our anatomical deficiencies in perception: we have no compound eyes nor the ability to see the ultra violet spectrum; are unable to taste mammals on the wind, the way a reptile does, with its tongue, or store solar energy through our skin cells as invertebrates do. We have a limited hearing range. We miss the scent of wind-shifts. We are not carried aloft on thermals for a better view. Yet the creatures around us have nuanced ways of seeing, of being seen by each other, and mapping surrounding terrain.

We use our imaginations instead, our capacity for pattern-finding, for making associations and deriving meaning. We navigate by science but also by story. And it seems to me that at their most authentic, these creative ways of being are a deeper wayfinding than mere mappings: they are our way of singing back country, on the inside as well as the outside, until even such distinctions dissolve.

As I began to spend more and more time at Yalgorup, its images and relationships surfaced in the poetry I was writing, shaped its rhythms and layered the textures. In my poems, these were also *my* images and relationships, the way events and characters of waking life are absorbed into our dreams without losing their haecceity. Rather than imagining country, I was being re-imagined through its lens.

Late in spring I was walking with naturalist Laurie Smith, <sup>6</sup> another generous guide, exploring ways to Lake Preston from the seaward side. It was rough ground to cover in the afternoon glare with only occasional ocean gusts to cool us. I began to regret tackling unfamiliar terrain on such a hot day. Tired but determined to complete the trek, I deliberately concentrated on my breathing, the feel of loose rocks skittering underfoot and the crunch of dried leaf litter. It's a simple technique to focus the senses, useful for conserving energy and allaying anxiety. The

unsealed access track cut through aged limestone. I was soon acutely conscious of sharp-edged shadows cast by large rocks and ridges with broken shelves and deep sockets. My vision became keener than usual: I noticed a barely trembling acacia branch the moment before a yellow-breasted robin launched into flight; spun my head to the right and looked down just in time to see the dramatic leap of a hunting monitor at full stretch, airborne limbs wide, reaching for a fallen log where it could became invisible as bark, only a tail flick betraying its position as it slid to the shelter of tree roots.

Then something happened for which I barely have words. As though my feet and the ground were joined, the skeletal structure and deep seams of earth and rock beneath my soles seemed tangible as my own flesh or the aching joints where cartilage has worn thin. I felt a country of calcium and salt, cloaked in a sand-skin cast from crushed shells blown off the coast; Yalgorup's limestone ribs, hardened in percolating rain; its lakes, blue veins of a body made from bone and tears, shaped by breath and flood.

When we reached the lake, it was such a home-coming that I cupped its water in my palm and wet my lips in greeting, and as a sign. It's the way I've taken sweet offerings of  $prasad^7$  or touched the cooling ash of a sacred fire-pit in other places, at other significant moments. The lake clung to my skin like salt residue from a naming ritual.

The names for these landscapes are Mandurah, from Mandjar, meeting place; Pinjarra, which means wetlands; Yalgorup, place of swamps. This is a country of dissolving boundaries. The trees and reeds massed along many shorelines lean out and gaze at themselves in looking-glass lakes. Between their beauty and its reflection, between land and water, is a space where stories are timeless and country is alive. The shady tuart woodlands are filled in with soft peppermint under-storeys, lakes fringed by samphire flats, salt-marshes and swamp paperbarks. Wind and glimmer play in shifting shadows and brushstrokes of light. But it's not a picture, or a framed mirror: this is a place of portals, beckoning the patient visitor to slip inside.

In September's cool dawn, I lay quietly at the edge of Lake Hayward under a tangle of low branches, as a family of blue fairy-wrens flitted about busily, calling to each other, just overhead. In early May I sat on Lake Clifton's observation jetty at mid-morning, my bare legs dangling over the water, and watched astounded as a black swan flew straight towards me without veering, then passed by so close I heard the wind through its wings. Minutes later, tree martins and welcome swallows, gorged after feeding on newly hatched midge larvae, lined the railings surrounding me as though I were part of the structure. I knew they had just fed because the hatching swarms formed dense columns which rose from between the lake's fringing trees in dark spirals so like smoke that several visitors ran for their cars, thinking it was the start of a bush-fire. But a drone resembling miniature chain-saws told another story as millions of insects explored the air.

Such disturbances are rare. There are many places in Yalgorup notable for their stillness and silence, though they don't have the special presence of thrombolites. Baudrillard could have been describing the wetlands when he wrote, 'It is this stillness things dream of, it is this stillness we dream of.'<sup>8</sup> At Martin's Tank, for instance, the paperbarks grow so close to shore I can slide to the ground, lean my back against a tree-trunk's interleaved softness, then stretch my feet and cool them in the shallows.

Each old tree's torso is wrapped in moth-wing layers of papery fibre, bark that hangs down in tissued swatches forming curled patterns as it peels away. As the folds loosen they rustle in the wind like leaves of old prayer-books; shadows fall in paint-strokes on the hollows between whorls, shafts of sun highlight curves and scrolls. Some trees have a pale peach or pink flush to their bark; others are salt white, with dramatic charcoal markings, like shading on a sketch. Their branches, outstretched and sinuous, express different moods in changing light. The tree that seems peaceful as a sage, streaming white hair haloed by the midday sun, can become a tortured soul with gesticulating limbs by dusk. Many are clustered in groves, though like the thrombolites, they are individual, gnarled characters I look forward to visiting.

When I go to Yalgorup alone, I never feel lonely. At Lake Preston, where the causeway to Preston Beach divides the waters into north and south lakes, I've watched a single kangaroo sit at the lake's edge at daybreak, gazing across the water. That morning, out on the sandbars, avocets and banded stilts and shelducks had stopped feeding and were standing perfectly still on their reflections. It was a landscape on the boundary of day and night; everything paused, waiting for a solstice sun to rise and mark the year's still point. And when it did, all energy seemed focused on that radiant pendulum. As it rose above the tree canopy, warming air lifted the fleecy, golden mist which covered the lake. Cleared like breath from glass, it left water polished as an ephemeral mirror in which birds and trees hung motionless under their doubles. Then all changed again. A breeze ruffled the reflections, creatures turned back to feeding. And despite this movement, it seemed the lake held its hypnogogic trance between sleep and dream, where, for a moment, the world within the world is glimpsed.

At Lake Clifton, the thrombolites' ancient presence creates this same impression, no matter what time of year or day I visit. I'm often reminded of South Australian poet John Shaw Neilsen's image of ripples around rocks as 'thoughts coming out to the edge of a dream'. I think

of this line from 'The Crane is my Neighbour', when I see the white-faced heron which haunts a particular stretch of shallows by the boardwalk. A lifelong love of reading has shaped my perceptions. When I found reference to the wayfarer's way of attention, observation, navigation by signs, by memory, by experience in Beverley Farmer's book *The Bone House*,<sup>9</sup> I wondered: by whose memories and by which signs do I navigate this landscape? Where do they meet?

In both the cultural and the scientific narratives of Yalgorup, thrombolites exist at the boundary between the animate and inanimate. Researchers are still inquisitively separating out the various living forms and functions within each microbial community, unravelling and identifying complex relationships which enable organisms to co-exist at a density of 3,000 per square metre. <sup>10</sup> It has been established through the Pilbara fossils that reefs like those at Lake Clifton existed 3.5 billion years ago and were widely distributed in the oceans. It is highly probable that a type of cyanobacteria<sup>11</sup> enabled life to flourish on earth by increasing the atmospheric oxygen to twenty times its original level. <sup>12</sup>

And the Bindjareb creation story, too, remembers the Woggaal eggs in the beginning.

To me, the thrombolites are akin to Diane James' concept of 'rocks of deep time', which names the transition I feel when at Lake Clifton, as I move away from what she calls 'the surface of shallow time'. <sup>13</sup> They draw energy up from the springs and down from the sunlit sky of the west coast, transforming it into life for themselves and oxygen for the planet. Semi-submerged for half the year, they survive on seasonal inundation and a delicate balance of lacustrine chemistry. These amniotic waters may become embalming if nutrient levels continue to rise due to agriculture and urban sprawl. Can we learn in time to tread more lightly here?

I think, as I write, of reflections on the lake, plants and birds lying weightless on its polished surface, like perfect offerings to the light they came from. There is only a handful of places left on earth where thrombolites still live and grow. In their precariousness, they point not only to life's origins but to that darkening edge which all living things must eventually reach. I think of that time at the end of each day, when the black swans fly in low from the south, necks outstretched. They look like a line of long stitches which night pulls to its far shore, that shore running like a seam through the twilight silk of sky and water.

Darkness and light live here in relationships I have yet to understand, but I suspect it has to do with the line we trace around its edge whenever we draw a heart. The line which defines what we love is the edge we feel so sharply when it is relinquished. Is that the reason why so many of us remain indifferent to country for so long and why so few can name even the trees in their own street? In a nation where half of us are migrants or born of a migrant, with many others dispossessed of their land, is connection to country too painful?

Knowing the names of trees or birds is not, however, knowledge, and only sometimes is it the beginning of understanding or affection. As the Indian sage Krishnamurti cautioned his Western followers, naming something is not the same as seeing it. In Roger McDonald's book, *The Tree in Changing Light*, there is a chapter about the painter Tom Carment, who painted trees because he was interested in the emotional content of the light around them, something he said he could no more give a name to than he could give a name to the trees.<sup>14</sup> I have a great deal of empathy with his attitude.

But there's a place for practical knowledge, which, beyond names and a sense of engagement, demands time and a special kind of attention. Especially to know what is no longer there. Walking at Lake Clifton with Galliano Fardin and his wife Nancy, I suspect it also takes love. They share a nuanced relationship to this land, the familiar intimacy of longtime residents. He's a distinguished artist whose inspiration comes from the landscape; she's a conservationist making a difference in her community. They live on Lake Clifton's Eastern shore in a house they built themselves over twenty years ago. When they first arrived, there were bandicoots, long-necked turtles, carnaby's black-cockatoos and boobook owls. Now, they told me, there are hardly any. The same is true for black monitors, stilts, bee-eaters, bats and bungarra. <sup>15</sup> They rarely see hooded plovers, tawny frogmouths, yellow-breasted robins or brown falcons on their land. New species are moving in, though not all of them are welcome.

The Fardins have planted thousands of trees, re-foresting cleared paddocks, yet only a few hundred seedlings have survived to maturity. The park's tuarts are dying. In some areas of the original tuart forest, here on the Swan Coastal Plain, which is the only part of the world where tuarts occur naturally, the mortality rate is 50%.<sup>16</sup>

At Yalgorup, many remaining tuarts have stark grey upper branches; dead wood forks skyward like inverted lightening or broken arms of a ruined clock. As emptying skies and seas return to their original unwritten blue, they tell us catalogues of birds and creatures are vanishing.

Scientists have now identified the dieback species *Phytophthora multivora*; tuarts were thought to be resistant to the pathogen and nobody really knows why they became susceptible. Is it something we did or is it a natural cycle? Have we tried to fix things without fully understanding the ecological consequences of our so-called solutions? Galliano wonders if maybe the trees are dying because our activities have become separated from issues of survival.

At the thrombolite reef, Western scientific knowledge and Indigenous wisdom concur: the microbialites — the Woggaal Noorook — are precious markers of life's origins. And we agree: they are threatened by our way of life, though as with the wider debate on climate change, there is no consensus on what constitutes the danger, what ought to be done about it, or by whom.

While we try to reach conclusions about our impact on the thrombolites, they silently mark time at the threshold of living and dying. The immediacy of the threat to their precarious existence, in contrast to the ancient, living lineage they represent, is a potent metaphor for our time. But because this landscape has also kept them alive for thousands of years, I think of it as a place of hope. With the help of the threshold guardians, Yalgorup has encouraged me to recover my sense of place and shown me how caring for country carries us further, together, than we could go on our own.

Like every story at Yalgorup, this one has water running through it, sweet and salt, in drought or inundation, above and underground: I'm estuarine, bi-cultural by nature and circumstance. Like the freshwater here which seeps from springs and collects deeper down, I've arrived after a long journey. The salt was always in my veins. I am at home here.

The waters of Yalgorup wend their way home through a catchment sprawling over hundreds of kilometres, from as far inland as Williams. Run-off soaks the wetland's mudflats and is filtered through its salt-marsh reeds. In winter, when rain dilutes a lake's salinity, a thin lens of sweet water rests on the heavier, salty layer. This lacustrine syntax is repeated in the underworld of limestone aquifers. Tree-roots reach for the fresh water that floats at the top of the water table.

The earth through which all this water flows is folded and layered, so that coming upon a lake or pool here has something mysterious about it, a sense of discovery or revelation. This accords with a belief held by most traditional cultures, that life-sustaining water bodies—rivers and wells, fjords, billabongs and brooks, lakes and inlets—have special significance. They are boundaries, and as Martin Heidegger observed, 'a boundary is not that at which something stops, but that from which something begins its presencing'. <sup>18</sup> Thousands of years ago, Yalgorup's traditional Nyungar owners, the Bindjareb people, founded a culture on this understanding. They learnt it from country. We can too.

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## **Endnotes to THRESHOLD COUNTRY**

## (Awarded The Nature Conservancy Australia Essay Prize 2010-11)

<sup>12</sup> McNamara KJ, *Stromatolites* Revised edition, p 8. (paraphrased). W A Museum 2009.

<sup>13</sup> James D, 'An Anangu Ontology of Place' in *Making Sense of Place*, p 109. National Museum of Australia 2008.

<sup>14</sup> Roger McDonald, *The Tree in Changing Light*, p 66. Knopf 2001.

<sup>15</sup> Fardin G & N submission to *Environmental Protection Bulletin No. 4* Strategic Advice— Dawesville to Binningup, May 2009.

<sup>16</sup> *Tuart and Tuart Communities*. Eds BJ Keighery and VM Longman, Wildflower Society of Western Australia(Inc.) Perth Branch Publication June 2002

<sup>17</sup> Thrombolite (microbialite) Community of a Coastal Brackish Lake (Lake Clifton) was listed as critically endangered under the *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act) on 07.01.10

<sup>18</sup> Heidegger M, 'Building Dwelling Thinking' from *Poetry, Language, Thought*, translated by Albert Hofstadter, Harper Colophon Books, New York, 1971. Quoted by Scott K, in 'Presencing Nature' in *Walk Catalogue*, National Exhibition Touring Support (NETS) Victoria, *2009*.

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<sup>&</sup>lt;sup>1</sup> In 1990 Yalgorup was added to the Ramsar List of Wetlands of International Importance (Ramsar, Iran 1971).

<sup>&</sup>lt;sup>2</sup> McNamara KJ, 'Stromatolites—The Ultimate Living Fossils', in *Australian Natural History* 22:10 476-480 1988; Luu R et al., *Thrombolite (stromatolite-like microbialite) Community of A Coastal Brackish Lake (Lake Clifton) Interim Recovery Plan No* 153 2004-2009. Western Australian Department of Conservation and Land Management. Perth 2004.

<sup>&</sup>lt;sup>3</sup> Findlay M, 'Understanding Place through Narrative', p 13 in *Making Sense of Place*, National Museum of Australia 2009.

<sup>&</sup>lt;sup>4</sup> Thrombolite fossil shown to me by Dr Kath Grey, Chief Palaeontologist at the Geological Survey of Western Australia, Department of Mines and Petroleum.

<sup>&</sup>lt;sup>5</sup> Edward Relph, 'A pragmatic sense of place', in *Making Sense of Place*, National Museum of Australia 2008.

<sup>&</sup>lt;sup>6</sup> Naturalist Laurie Smith, an Adaptation Resident 2009-2010 at Symbiotica UWA, was joint collaborator with the author on *Sharing the Edge* [a creative, research and community arts project based on Lake Clifton] during their residencies.

 <sup>&</sup>lt;sup>7</sup> Sanskrit for 'an oblation' or 'gift from god'; blessed food given and received after ceremony.
<sup>8</sup> Baudrillard J 1999 '*Photographies 1985-1998'*, quoted by Dr Paul Thomas in 'Stillness: Arts, Science and Technology', Director's Statement, John Curtin Gallery, Biennale of Electronic Arts Perth 2007.

<sup>&</sup>lt;sup>9</sup> Farmer B, *The Bone House*, p 10. Giramondo 2005.

<sup>&</sup>lt;sup>10</sup> Australiannationalparks.com/westernaustralia/Yalgorup.

<sup>&</sup>lt;sup>11</sup> Moore L, cited in *Stromatolites* by McNamara KJ: the dominant filamentous cyanobacterium, scytonema, forms the mineral aragonite from calcium carbonate in a photosynthetic process fed by upwelling groundwater that is rich in calcium bicarbonate.