We often used to say ‘where there is smoke there is fire, and where there is fire there are blacks, and where there are blacks there is water’.


Chapter 4

Water to think with: a water history of interactions in the western Simpson Desert

The matrix of Simpson country is rock and sand, but the scarce water that does exist there shapes the heart of the life in it. The specific forms of people’s interactions with those waters, how they deal with their variability and unpredictability, are keys to understanding the histories of the region.

In the previous chapter the focus was on interactions between people – the local Indigenous people and the incomers, white explorers, settlers and scientists – in the particular context of Charlotte Waters. In this chapter, the focus, and the exploration of the concept of ‘entanglement’, broadens to consider the relations of people to the water places that make their lives possible in the western Simpson Desert area.

At one level it is blindingly obvious that water is vital for life, and especially so in a desert, so that any understanding of peoples’ relationships to places in a
desert will need to be grounded in thinking about water. But this very obviousness can lull us into thinking that we know what water is in all contexts: that is, a practical necessity, a universal resource, with all water the same. But this generalised notion of water is insufficient, as anthropologists and cultural geographers working from a starting point of the inter-connectedness of water have argued.¹ A de-contextualised notion of ‘a water source’ as a neutral point in the landscape ‘out there’ is only sustainable if we assume that people’s relationship to water is a direct or biological one only, not one mediated through learnt cultural knowledge, inculcated in people’s habitual understandings as they grow up involved in the world around them.²

The obviousness of water diminishes when we start asking different questions about it – what does interaction with water look like at the small scale of historical lived time?

A ‘water place’ may be understood to possess the same active capacities as an object. Objects are not passive, separate entities in the socio-cultural world, they are players, actors in the process of interaction. They contribute to the orchestration, the patterning of what happens. This is generally invisible to the people involved, taking place at the level of habit, rather than at a consciously articulated level. For example, the way the chairs are arranged in a meeting room both reflects assumptions about how a gathering will be conducted and affects how it can be. So objects which make spatial structures are not merely a backdrop for social life, but a medium through which social relations are produced and reproduced.³

This way of thinking applies also to water places. They share the property of actively orchestrating people’s interactions, and in turn being affected by them, as the locale accretes personal histories, stories of the Ancestors, and objects, which distinguish it and through which it is remembered. Attention to this process expands the aim of focussing on water. The water, a particular place where water is or has been held, is specific and meaningful. It is not simply a

² See discussion of modes of learning in chapter 1.
³ An approach developed by interpretative archaeologists such as Barrett 1988: 11, 1994; J. Thomas 1993a, b; Bradley 1993; Gosden 1994: 16, amongst others.
neutral substance and object of economic exploitation, but a cultural actor. We already know the obvious necessity that the water will be a key focus for peoples’ actions. We can turn the question around to consider not ‘how far away is the water’ but ‘what it is that happens at this particular water focus’? Water then is a lens to examine the different histories of relations to places enacted by Indigenous and non-Indigenous people in the region. Inevitably, it also provides another way of looking at the interactions between people as they find ways to live with and around each other in the same country. In this way we can think with water rather than about it.

In this chapter I have assembled historical descriptions of Indigenous and white interactions with water, to gauge the forms that they take and the implications they have in turn for the interactions between people at the same place. What aspects of water do people pay attention to, value. What expectations do they have of it? What stories do they tell of it? What are their practices in acquiring, maintaining and using it? The outcomes of the practices may often be unforeseen, and can provide insights into what is often hidden to the practitioners – their unexamined assumptions and habits, in contrast to their overt intentions. This provides another way into exploring the processes of entanglement of places.

**Digging deeper, or moving on**

One way to tell a ‘water history’ of the interactions of the Simpson land and people would be through a neat story of **digging deeper**. Such a story would track the importation of colonial technological capacity for drilling into artesian waters to provide ever more reliable access to deeper underground aquifers. As the Minister for Mines wrote in his introduction to the Department’s non-technical *Groundwater Handbook*, ‘in South Australia lack of rainfall has necessitated wide-scale development of underground sources of water’. This development is taken to be a self-evident good. A *vertical* story, it makes the error of isolating water from its landscape and involvement in histories of people and living things, and overrides local Indigenous people’s knowledge of the behavioural dynamics of water in the region. The latter involves a more *horizontal* approach to the uneven distributions of water, as it is based on the

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4 See Richards 1996; Bradley 2000.
5 Department of Mines South Australia 1959: 4.
capacity to **move on** from one water place to another. This draws on knowledge
and experience of the country’s responses to rain, and the locations of rare
potable permanent springs and other available water. Water ‘does not happen
by chance, but rather exists through the creative action of Dreaming beings. …
localised water sources form part of the subsistence geography of country and
almost invariably part of the sacred geography as well’.6

Told in this way, a water history taps into contrasting attitudes to, and policies
of, land acquisition, management and development. By placing water at the
centre, my aim is not to separate it out as a stand-alone element, but to refine
attention to it and re-integrate the action of particular waters in the stories of
the country. Thinking of water as separate and generic is a hallmark of the
‘vertical’ story. It is a story worth telling, and is outlined below.

But flowing through its main trajectory of technological replacement, and
disrupting it, is a counter story. This one recognises the spatial and social
renegotiations that necessarily followed the reconfiguration of pre-existing
water places and the insertion of new water places7 into an existing cultural
landscape.

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**Forms of water**

The forms of surface water available in the region are the permanent mound
springs, temporary waterholes in riverbeds and creeklines, the sand desert
mikiri wells and claypans, and wetlands (see chapter 1 and 2 for details).
However, most desert water is covert, not found on the surface at all, but
largely below ground. Surface water that does not rapidly evaporate percolates
or migrates into underground sediments and the joints in rock to form ground
water, lying at a depth of less than ‘a few’ hundred feet.8 It also forms sandhill
soaks, where rainwater seeps readily through the sand to form a layer of fresh

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7 I use the term ‘water place’ in preference to ‘water source’, in order to emphasise and give
conceptual space to the multiplicity of interactions that the water is part of, not just serving as a
resource.
8 Department of Mines 1959: 17-18; Ward 1923: 5-13. 100 feet converts to 30.5m, 10 feet to 3.5m.
water perched above saline groundwater, generally at a depth of less than 20-30 feet.  

In contrast, ‘pressure waters’ or artesian waters will ‘rise to the surface, or even flow, when penetrated’ either by drilling or by natural outlets such as mound springs. This water is often very hot at the surface because it has been heated in the earth’s interior. Artesian waters provide large volumes of flow from great depths of several thousand feet. Thus they require the use of drilling plants to extract them.

**Variability: ‘a great disappointment’**

Because rainfall in the region does not follow seasonally predictable patterns, availability of surface waters is patchy and variable. For this reason time becomes a critical element in living strategically with the way desert water behaves – this is what makes it distinct from the water of temperate areas. Outside deserts, a thirsty person must concern themselves with where a body of water is located, not how long it will last. The experienced explorer John McDouall Stuart wrote of his disappointment with the Finke River:

> very much surprised to find so little water. I had no idea it would have gone away so soon. The bed is very broad and sandy, which is the cause of the rapid disappearance of the large quantity that I saw when I crossed before. This is a great disappointment, as it was my intention to run it down, in the hope that it would take me into South Australia (Sunday, 5th August, North of Chambers Pillar, 1865).

Baldwin Spencer draws a detailed word picture of the contrast in the country near Charlotte Waters when he visited in the dry season after drought in 1894, when ‘everything was parched and silent with no sign of animal life’ and then again in 1895 after heavy rain when ‘everything was green and bright and teeming with life’. ‘The whole change from sterility to exuberant life had taken place as if by magic within the space of only a few days.’

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9 Department of Mines 1959: 16.
10 Department of Mines 1959: 9.
11 Department of Mines 1959: 25.
12 See chapter 1 and Gibbs 2006: 206-264.
13 Stuart 1865 [1984]: 236.
14 Spencer 1896: 17-18, 22.
Ambitious squatters, wise after the event, also learned this lesson about the temporality of water, telling doleful, wry accounts of buying land in the region, only to find that ‘the waterholes which eighteen months before were two hundred yards long were dry’. This tug-of-war between the white incomers’ hopes and expectations and the variable environment is a theme of this chapter.

**Living with variability**

In marked contrast, for at least 3000 years, the Lower Southern Arrernte and Wankanguru, Arabuna and Luritja people of the region have accepted and learnt to live with this characteristic variability of water at a number of levels. In terms of supply, intimate systems of knowledge broadened the bases of water supply available to them. When travelling, or in exceptionally dry areas or seasons, sections of roots of water-bearing plants, such as *Hakea leucoptera*, *E. opaca* (desert bloodwood) or *E. socialis* (water mallee) could be drained into a bowl to provide a drink. Water-storing frogs *Chiroleptes platycephalus* could be dug from their burrows. Waterbags made from hare wallaby, rat kangaroo, kangaroo or wallaby skins were carried:

> The skins were taken off without cutting them and the leg and arm holes were tied up. They turned the skins fur-side in and filled them with water at the neck aperture. The bags would hold from two to four gallons, according to the size of the animal. The water was perfectly clean and good and the bags lasted a long time with care.

‘Native wells’ were formed by digging access holes into the shallow ground waters, and, in some cases covering them and maintaining them over long time periods. Many of these are still marked on contemporary topographic maps, in ‘gum creeks’ (i.e. the better supplied watercourses that support coolibah eucalypts), wide river beds such as the Finke, and on the edge of some sand dunes. Bingey Lowe described the process of their construction:

> When the country was wild the Old People would look at the sand and dig maybe nine, twelve feet to get water, let it stand, get rid of all that dust and dirt, get clean water. Would dig down maybe to here [indicates his elbow] and if sand a bit damp, means there’s water underneath. Use them little coolamon and sharp stick, dig a bit, then scoop it out. All this country [near Mt Dare station has]

15 Whittington 1897: 4-5.
16 Smith and Clarke 1993.
17 Latz 1995: 209, 190, 194; Magarey 1895.
240
These wells were ardently sought by white explorers. John McDouall Stuart, in his first-through-the-Center single-minded explorer’s pursuit of any water at all in order to keep his men and horses going, records all ‘gum creeks’ sighted and the small native wells they harbour. The more scarce the water, the greater the impact of his party with their horses’ relatively great thirsts, draining the rare, fragile waters they found. For example:

Tuesday, 1st May, North-west Side of Mount Barkly. On examining the water, I find it is only a drainage from the rocks, and there is not more than two gallons for each horse. ... I do not like the appearance of the country before us. Started on a course of 335 degrees, and at six miles and a half came upon a large gum creek divided into numerous channels: searched it carefully, without finding any surface water; but I discovered a native well about four feet deep, in the east channel, close to a small hill of rocks. Cleared it out, and watered the horses with a quart pot, which took us long after dark - each horse drinking about ten gallons, and some of them more. Natives have been here lately, and from the tracks they seem to be numerous.

Friday, 4th May, Gum and Spinifex Plains. At times this country is visited by blacks, but it must be seldom. ... at thirty miles came upon a native well, with a little grass round it; the bottom was moist. ... Commenced clearing out the well the best way we could, with a quart pot and a small tin dish, having unfortunately lost our shovel in crossing the McDonnell ranges. We had great difficulty in keeping the horses out while we cleared it. To our great disappointment we found the water coming in very slowly. We can only manage, in an hour and a half, to get about six gallons, which must be the allowance for each horse, and it will take us till tomorrow morning to water them all.

Stuart took the water as a right, with no attendant responsibilities for the disproportionate cost his needs imposed on the supplies. In contrast, Alfred Giles, part of the first survey team for the Overland Telegraph Line, following Stuart’s track in 1870, expressed his awareness of the care the local people had taken to establish wells, and that his party’s presence was something of a threat to their precious water supplies, maintained in an area where it was especially scarce:

We surprised a mob of blacks - five men, two or three women, and about a dozen piccaninnies - but their only water was a muddy

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20 Macfarlane field notes 26 July 1996.
claypan, and they had most ingeniously made the water to filter through sand by digging holes on the upper side of the claypan. ... the fact of about a dozen blacks subsisting on so precarious a water supply proved beyond doubt its scarcity in their neighbourhood, and the hostile attitude in which they placed themselves can be attributed solely to that cause, and not to any hatred, but to guard their precious supply, which was threatened by an enormous animal and its rider which they had never previously looked upon.\textsuperscript{21}

Charles Winneke, although expressed in the characteristically grudging tone he uses to describe Aboriginal people, gives a broad description of the ways people modified waterholes in the area:

These are merely small holes, from a few feet to perhaps 20 feet in depth, scraped out with the aid of sticks and pieces of bark or other wooden utensils, and containing at most but a small supply of water; sufficient perhaps for the requirements of thee or four natives for as many months during the year. ... I have discovered many hundreds of these wells in my travels, and have arrived at the conclusion that some are of great age, or, more correctly speaking, have been reopened for a great number of years by different generations of aboriginals. ... In many places the natives seemingly take the utmost care to preserve these insignificant wells from evaporation by carefully covering them over with rubbish. ... they only use the water for drinking purposes ... they are also opened to entrap game.\textsuperscript{22}

No one of these wells could support permanent Indigenous occupation. They did so only as a network linked through people’s movement and knowledge of where there was available water, around which the Indigenous people organised their lives. Knowledge of country was saturated with knowledge of water location and duration, and with the obligations and responsibilities accessing it entailed. Monitoring where rain was falling and how many people had used it previously, for how long provided a guide to how much water could be expected in a given place. This was part of the reason for the intense scrutiny of others’ movements. Big gatherings could only happen when there was the water to support them.\textsuperscript{23}

\textit{‘Wake up that green grass’}

Rain water is also available indirectly, taken up by plants, generating pulses of grasses and forbs, as it ‘wake up that green grass’, as Bingey Lowe said (fig 2.3,
4.1). In Australian prehistory, the development of methods for harvesting seed and processing it by grinding it between abrasive stones to provide a low-calorie and labour-intensive but reliable food is considered to have been a technological/economic/social change in response to increasingly dry and variable climatic conditions in the late Pleistocene: a specific semi-arid and arid zone adaptation.24

The suite of practices required to process seed show the many linked generative forms and phases of water as it diffuses through the life of the region. For example, five kilometers west of the banks of the Finke, I recorded a cluster of eleven hearth mounds of burnt and heat shattered rock. These were associated with a number of grinding top-stones and at least ten different grindstones, including one approximately 12kg in weight, used for seed processing; a large amount of processing and baking was going on in this locality. Also in the vicinity was an assemblage of tula adzes used in wood-working on site.25 So, seeds were generated from the rain-fed grass, the standing water in the local claypans was needed for the grinding process, and allowed a leisurely stay in the locale by a substantial group of people (fig 4.2-4.5).

A record by Overland Telegraph Line supervisor Christopher Giles takes these connections further. 1870 was a good year, the best year for the next 20 years in fact.26 While collecting poles for building the telegraph line in the Finke River bed, Giles encountered a tree platform on which was a ‘native granary’. In it were stores of different grass seeds in bags made from the ends of shirt sleeves and trouser legs that had been appropriated earlier from Giles’ survey team’s washing line (see chapter 3). Together with them, Giles also recorded a ‘rain maker’s equipment’ – a bundle of hair string, with a pearl shell ornament at one end and a large marble at the other, traded from great distances to the north and south.27 The ceremonies of rain-making were an important element in

24 The timing of this change is debated, and seems to have varied in different parts of the arid zone, but was definitely broadly well established in Australian desert cultures by the mid-Holocene, i.e. around 5000 years ago, with an increase in intensity of use between 1400 and 600 years ago. Smith 1986; Fullagar and Field 1997; Veth, Fullagar and Gould 1997; Hiscock 2008: 207-8.

25 This is a Wankanguru word for this type of artefact. They are semi-circular in shape, thick, fastened by resin to a wooden handle called a koondi to form a composite wood-working tool (Hiscock and Veth 1991: 333).

26 P. Byrne to Pastoral Land Commission 1891: 112.

people’s relationship with plentiful grass-seeds. Spencer and Gillen recorded such ceremonies at Charlotte Waters in 1901:

While we were at Charlotte Waters the natives performed an especially interesting rain ceremony, as it was a time when rain might fall. As can be easily imagined, the water supply is a very important matter to the native. Without water there are no animals and no plants for him to feed upon, and in all of the tribes there are special groups of individuals who are known as rain-men, upon whom devolves the duty of seeing that the supply is maintained. 28

During his 1938 visit to Mt Dare, Charles Mountford recorded ‘Southern Aranda Rain songs associated with Erina waterhole on Mt Dare station’ sung by Ilayarinika whose father as a member of the Rain totem, accompanied by sticks being beaten, and another sung by a group. 29 He noted that the women in the camp near Mt Dare had put out pans of water for the diamond sparrows (diamond firetail finches) to get a drink. ‘The women said that they were the rain makers in the “dream” time’. 30 Mountford also encouraged two of the Southern Aranda stockmen working on the station to draw pictures using red yellow and white crayon on thick brown paper, which Mountford annotated. Boxer chose to represent ‘clouds’, ‘creek running’, ‘Tiajilpa rainbow’ which he would usually have made as a ‘mark on chest’ and ‘marks on boomerang’, probably in ceremonial contexts. 31

28 Spencer 1912: 200-201.
29 SLSA Mountford-Sheard Collection, A2901 Side 3 side 42, A2912 Side 1 (not restricted). List of Mountford’s sound recordings for 1938/9 Index compiled by Grace Koch and Audrey Jones at AIATSIS.
31 SLSA Mountford-Sheard Collection, North South Australia, Aboriginal crayon drawings, 1935, 1938 Vol II. 3 Crayon drawings, 1938 Mt Dare. Rainbows are associated with Rainbow Serpents, and they with permanent waters and connections between subsurface and surface waters and rain (Rose 2004: 39).
**Fig 4.1:** Grasses with seeds flourishing after rain, growing near the cluster of hearths on the Finke River flats, October 1997.

**Fig 4.2:** Hearth - heat shattered stone on the Finke River flats, October 1997.
Fig 4.3: Large grindstone close to the cluster of hearths.

Fig 4.4: Smaller array of grindstones showing diversity of sandstone types.
Fig 4.5: Tula adzes and large flakes.
In 1968, Mick McLean recorded the dramatic ‘Seed song’ from the *mikiri* well Pulawani, on the eastern side of the Simpson dune field, where his sister Topsy was born. The song was used in the increase of hard acacia and pigface seed in the face of the ‘searing heat and desperate drought’ of the central Simpson sand desert.\(^{32}\)

1. **Thruku thurkungaya**
   Dry leaves everywhere

2. **Thruku thurkungaya**
   Dry leaves fallen on the ground.

3. **Ngarditjita ngaljuruka**
   Dry stumps grow green!

4. **Ngarditjita ngaljuruka**
   Dry stumps grow green!

5. **Thakata wirthiwirthi ya**
   Roots are growing

6. **Thakata wirhti ya**
   Roots are growing

7. **Thakata malurka maluru**
   Roots are swelling with sap.

8. **Kuna kuna katayaltu**
   Green, green colour all around

9. **Pakatayaltu**
   Green plants in vast numbers

10. **Panji thirra**
    Are standing up straight.

11. **Parriye manta,**
   They take the seed, with a stone they pound it

12. **Yantarayapa palthiye manta**
    They pound it, they smash it.

13. **Palthiye ngutha**
    (uta nhukulu karinha tharnira-ik’ armiri)
    (now tomorrow we will eat them)\(^{33}\)

Seed and the water for growing and processing it are not restricted within economic and practical spheres, but are embedded in the shared labour of production, the eternals of ritual and in wide-ranging social exchange networks stretching to the north coast for the pearl shell, and the south for the marble. Water in this dynamic, connected sense breaks down false divisions into ‘natural’ and ‘cultural’. It is a ‘nexus of relationality’, that ‘makes visible the relations between things, where people act to make the world work’.\(^{34}\)

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\(^{32}\) Hercus 1990b: 118, whole song p117-125.

\(^{33}\) Hercus 1990b: 117-121. My transcription is of only a selected few of the verses, which is a poor practice known as ‘frog-hopping’ (Hercus 1990b: 127). It is also given without the diacritics in the original, to at least evoke the sense and the power of the song, but with apologies to the singer and recorder.

\(^{34}\) Strathern 1995: 179.
**Mikiri-nganha ‘people from the wells’**

The capacity for local Indigenous people’s informed mobility to respond the temporality of desert water is exquisitely demonstrated in the network of paths and places of the Wankangurru, who were permanent residents in the vast Simpson dunefield. Rare, reliable soakages known as *mikiri* were the bases of their residency. These hold water in a shallow aquifer on underlying stony or clay pavements. They were reached by narrow underground passages, up to seven metres long, which reduced evaporation and spoilage, and required regular clearing and maintenance.\(^{35}\) They were a final reserve when the more variable supplies of surface waters in swamps on the edges of the dune field and in claypans throughout the dunes had gone. People knew how to locate and navigate back to them, predicting the amount of water that they would contain and keeping them clean and silt-free. ‘The soaks were always there when all the surface water had dried out: there was no reason to leave the desert’.\(^{36}\)

Like the permanent mound springs, the wells were refuges that enabled people to continue living in the area rather than abandoning it in times of drought. They would soon exhaust the food supplies in the vicinity of the water however, and so would move between springs or wells, and when drought was over, would disperse to take advantage of other sources, and to allow the food sources in the refuges to regenerate.\(^{37}\)

Their stories and our archaeological research at the wells make it clear that ‘the wells are different from each other in their physical environment and also in their mythological associations. They varied in relative importance as habitation sites and ritual centres and each has its own archaeological significance.’\(^{38}\) ‘Each well means something’: they are not ‘just water’. Nor are they the same as each other; each is historically distinguished.\(^{39}\)

The descriptions below bring out the web of elements that are involved in living on the wells that make the distinctions between them: knowledge in the

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\(^{35}\) Hercus and Clarke 1986.  
\(^{36}\) Hercus 1985: 25.  
\(^{37}\) Hiscock 2008: 204.  
\(^{38}\) Hercus and Clark 1986: 62.  
form of Ancestral stories, observation and learnt practices, details of how to live and how to navigate between places, visiting and trading to the west, east and south, and crossing the dunefield. Throughout these bodies of knowledge there flows a substrate of water references and insights about how to get to it and what to do with it.

Murraburt *mikiri* well was the furthest to the west of the twenty or so *mikiri* soaks, and so the closest to the Finke and Dalhousie side of the desert. This important place was a one key node in the network of places on the western side of the desert, linked to the Finke River places and those between. It was the first place the Ancestral Two Boys stop as they cross the desert from Kingfisher Springs (of the Dalhousie group), going through all the major wells to Goyder Lagoon, their mother following them with a wooden dish full of water. It is also part of the Rain story from Ilbora on the lower Finke.

Stone artefacts with gibber cortex located at least 50km into the dune field mark the passage of people from the Finke area into the dunes, claypans, soaks, and *mikiri* wells. The artefacts are less common and smaller in size as the distance from the gibber stone sources increases. A ceremonial stone arrangement with a complex of stones in straight lines, cairns and circles located on a cluster of three claypans 100km into the dune field testifies to the movement of people into the depth of the dunes after rains, for ceremony.

Archaeological evidence shows that Murraburt was repeatedly re-visited. As a result, hearths, stone artefacts used for woodworking and seed grinding, fragments of edge-ground axe, and bone – including rabbit bone, five human burials, two small stone arrangement cairns, and a clay tobacco pipe accumulated on the ground surface around the well.

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40 Hercus and Clark 1985: 25, 32.
41 Given as Marubardi in Tindale 1934.
43 Hercus and Clark 1986: 52; Hercus 1989: 104. This place is where the Finke River channel, after running underground, becomes visible in a deep, eucalypt-filled cutting below the surrounding gibber covered ground surface. There are several stone arrangements here, associated with formal stone artefacts – pirri points and microliths (Macfarlane field notebook Friday 14 November 1997).
44 Macfarlane field notebook 31 October 1997.
46 Tindale 1962.
47 Hercus and Clarke 1986: 53.
In 1965 Linguist Luise Hercus recorded three Wangkangurru people’s nostalgic childhood memories of what it was like to live on a soak. Mick McLean *Irinjili*, Maudie Naylon Akawiljika and Topsy McLean Ikiwiljika were born on one of the eastern wells.

Being so rare, surface water drawn from the *mikiri* well could be used as bait for a trap for accumulating numbers of small birds. The process is described with relish by Mick McLean:

> we all used to dig holes in the loose ground (by the soak) so that we could kill ‘sparrows’ [Orange chats]. We used to pour out water that we got from a wooden dish and put the water into the hole, we filled the hole right up to the rim. Then a mob of ‘sparrows’ would come. ... they would flock together to drink the water inside the hole. Two of us would be watching that hole all the time, there might even be a top-knot pidgeon! We used to break off branches and brush the birds into the hole. Then we killed them all in the hole. That was good meat, only a tiny amount on each, but it was sweet. We would take them back to our humpy and cook them.\(^{48}\)

They were content on the *mikiri*, but they remember the adults starting to reminisce and imagine the water flowing in the eastern creeks, and the pleasure of eating boney bream. So they decided to leave their country to go south-east to an outstation at Poonarunna – there was a drought, but good rains in south-eastern Queensland feeding the rivers there.\(^{49}\) They travelled ‘over sandhill after sandhill’. They slept in a different camp every night.\(^{50}\) On the way they dug carpet snakes from the dunes, caught bilbies, lesser bilbies, hare wallabies, and collected grass seed and pigface seed, which the women carried on their heads.\(^{51}\) The babies were carried in a wooden dish. The women left their big nardoo grinding stones behind, and instead carried water in waterbags made from hare wallaby and rat kangaroo skin, containing ‘good, cool water’ from the soak. It was enough, after all ‘you don’t want to drink all the time’, Mick McLean mused.\(^{52}\)

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\(^{49}\) Hercus 1985: 31.

\(^{50}\) Hercus 1985: 37.

\(^{51}\) Hercus 1985: 37.

\(^{52}\) Hercus 1985: 35.
In 1934 anthropologist Norman Tindale recorded one of the ‘people of the wells’, Ngaltja-kintarda’s description of how to travel across the sand desert between Pandi Pandi on the Diamantina River near Birdsville, to the big and ceremonially important waterholes on the Finke River and Dalhousie Springs, through the high sandhills, via several mikiri. This is a two to three week journey; 16 days to the Finke, a further 5-6 days to ‘Eweila’ [Ewillina waterhole] and Dalhousie springs. The instructions for travelling include ‘good water here, spell 2-3 days here’, and ‘camp in bush, no water’ overnight – a dour instruction that is repeated nine times:

Leave Pandi Pandi, walk 1 day WNW to east channel of Georgina River NE of Alton Downs HS (Tikeri).
Walk half day NW to Nela Naranji on W channel of Georgina above old Alton Downs HS 15 miles N of Queensland border.
One day sleep in bush; no water.
Half day NW to Puramana mikari, in Queensland. [This soak is one of several timbered by the Surveyors who surveyed the borders (Reese) [includes LA Wells 1883 – 1886 Madigan 1946: 10]].
Half day Jalkeri mikari (= Jelkerran of LA Wells see NT map of 31 March 1925). Sometimes no water don’t camp then, go on half day no water camp in bush. Half day Tjilparta mikari = kilpara of LA Wells. Spell 2-3 days here. One day camp in bush no water.
One day to Pulubutu mikari (Poolabunda of LA Wells, see NT map). Spell here for several days. It is real Wonkanguru country. The only ‘gibber’ hill is ‘2 miles’ southwards from the soak. It is a mura place where a hut is kept prepared so that the mura of Pulubutu may remain there. This place seems to be the same as that called Purabata.
One day SW, sleep in bush, no water. Wonkanguru, ‘a little bit’ Aranda country.
One day W to Walparuka mikari
One day W Parabara mikari
One day W ‘travelling straight’ ‘bloody water long way you know’ sleep in bush; no water
One day to Pilpa mikari, a real Aranda mikari; only a little bit Wongkanguru
Half day to Marubadi mikari, somewhat N or W a proper Aranda mikari; spell here several days
One day NW sleep in bush
One day NW dry sleep in sandhills; no water
One day NW ‘perish for water, hungry, see stones [eg hills] now, my country close now, go on’
One day to Elikarta, a Finke Creek clay pan ‘have a drink clay pan water sleep and spell one day’
Half to one day NW to Ulura waterhole on Finke, get water there

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53 Hercus 1987: 67-8 discusses Tindale’s record. She considers it ‘very reliable’. She gives more detail about Ngaltja-kintarda; his name means ‘throwing spit’, he was the father of Johnny Reese Njanpika, still living in 1987.
Sleep in bush W to Dalhousie Springs
One day to Dalhousie Springs ‘reach there, drink water’
One day NE sleep in bush
One day NE to Oleita waterhole, Finke Creek waterhole, stay there awhile
One day NNE to Eweila waterhole a big waterhole on the Finke Creek
One day NNE to Murulura, ‘waterhole, my ularaka there’

In this unadorned but graphic recitation of the known, used travel route across the Simpson dunes, the graded references as the traveller moves further west from ‘real Wonkanguru country’, through ‘Wonkanguru, ‘a little bit’ Aranda country’, into ‘a real Aranda mikari; only a little bit Wongkanguru’, reaching even further west ‘a proper Aranda mikari’ illustrates the other major aspect of adaptation to desert conditions, implicated in such movements; that is, social reciprocity. ‘Indigenous people’s main adaptation to uncertainty was to develop social ties that enabled people to move to resources as they became available. ... the social organisation of sharing was utterly essential’. They made it possible for people to move to better favoured areas during droughts.

In this case, there was agreement between Arrernte and Wankanguru groups that such crossings were acceptable, not an infringement of territorial integrity. It was important for the traveller to inform their ‘hosts’ of their travels, so that they could maintain a gauge on the use of water where it was scarce. The account also makes clear the crucial role of specific known, named water places.

Song cycles associated with particular wells and with the tracks between them, give a vivid glimpse of the fine details and inflections of living with the extremities of the dunes. One tells of the Crane, Wurru, who lusts after two young women and decides to kill the others in his group so he could have them to himself. He sings songs ‘to make the weather hotter and hotter, to make searing winds blow from the north and to make the sun glow like fire ... and to bring up a huge dust-storm.’ The others burrowed down into the deep sand to get away from the heat. There are limestone boulders at Beelpa well where they did this. He repeatedly sneaks off to have drinks of water while the rest of his mob are perishing from thirst. ‘Cover me over with cool sand’ he says in ‘falsely

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55 Rose 2004: 37.
pathetic tones’. Because of the wind they could not smell the water nearby. When they finally do, they turn into waterbirds.  

The last resident Wankanguru people walked out of the desert to Kilalpinina Mission from one of these wells in the summer of 1899-1900. Despite being homesick for the wells, they did not return to them, except to the western-most, Murraburt, leaving a vast amount of rabbit bones. In a landscape which allows archaeologists and historians to establish minimal chronological control, these places present a rare bracketed time frame. Archaeologists Mike Smith and Peter Clarke collected charcoal from hearths at these wells for dating. The dates obtained showed that Murramburt well was first occupied 2500 to 3000 years ago, at least. This correlates with first occupation dates of about 3000 years ago at Oolgawa swamp, on the south-west edge of the Simpson dune field (see map 1.2). Smith and Clarke argue that 3000 years ago was a maximal dry period, and so the water table is likely to have been available there during the earlier, wetter periods also, although there is no available evidence for people accessing it earlier.

Without constant maintenance, the mikiri silted up. They were thus difficult to relocate in the 1980s. Several of them had been driven over by the French Oil exploration lines of the 1960s.

If these inconspicuous but critical water-places had been seen as able to support the demands of cattle, they might have been taken up into the landscape of the late nineteenth/early twentieth century pastoral industry. The principle for dealing with water supplies for droving cattle was to keep the cattle moving from well to bore to bore, with an associated constant call for increasing the number and density of bores available for use by the stock (see below). The new water places were integrated into a mobile line and sometimes network of travel, which echoes the practice for people crossing the desert described above. In a direct duplication of that description, in 1903 the South Australian Minister Controlling the Northern Territory published a map showing the route to the

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60 Hercus 1987: 68.
61 Smith and Clarke 1993.
62 Hercus 1990a.
goldfields in the MacDonnell Ranges for prospectors, who were unfamiliar with the water locations and regimes of the country. This included ‘the waters &c, between Oodnadatta and the field’ with the added ‘NOTE: - in times of drought, water is only procurable at the Wells, Bores, &c. After good rains it is plentiful in Waterholes and soakages along the course of the Rivers and Creeks’\(^{63}\) (fig 4.6).

It was the distance between waters that was the make or break factor, that led to stock being trapped at Dalhousie Springs for months, as described below, and this was the imperative behind drilling more bores in the cause of extending and hastening travel through the country. There was even an overconfident early twentieth century plan to build a line of bores which would open a stock route from the west to the east across the dunefield. However, the country was ‘so inhospitable’ that after the first bore was sunk at Anacoora in 1903, the project was abandoned.\(^{64}\) Obviously, running stock and sinking bores immediately changes people’s relations to water, as examined in the next section. It can be seen that the intent behind the bores was to exploit any available water - generic water - for profit. However, an unintended outcome of this effort was the establishment of new places which people could incorporate into the network of places around which they based their lives, and so were enfolded into people’s lives and local histories.

**Wells and bores: extractive technology and a place to live**

In the late nineteenth-early twentieth century officials expressed a bullish optimism about the need to ‘just add water’ for the desert to bloom. Governor MacDonnell of South Australia in 1864 considered that ‘dismal, parched, and impracticable as much of the country looked, cattle are now reared there which would be considered fat and good anywhere. … [W]e may possibly yet kill beef fattened on the ‘stony desert.’’\(^{65}\) Meteorologist CL Wragge, wrote ‘It is impossible to over-estimate the good effect of the bore in developing the

\(^{63}\) Sketch plan (revised) by HYL Brown S.A. Government Geologist 30/6/03.

\(^{64}\) Madigan 1946: 11.

\(^{65}\) MacDonnell 1864.
Fig 4.6: Sketch plan (revised) showing Altunga and Winnecke’s Depot, Goldfield, in the MacDonnell Ranges, also the route waters &c, between Oodnadatta and the field. Published by authority of the Hon the Minister Controlling the Northern Territory, HYL Brown S.A. Government Geologist 30/6/1903
interior of South Australia. It is now beyond doubt that the subterranean water-supply is enormous. Climate may be modified and arid deserts made important centres of civilisation’. As late as 1925, the then South Australian Governor Tom Bridges maintained this hype: ‘the truth [is] that, given water … the possibilities of the Australian hinterland are boundless’.

This is the ‘absence model’ of water in the desert. It is a seductive narrative form that assumes that the desert offers untapped potential and is changeable through human intervention, ‘a resistant landscape which will be finally transformed through technological innovations’.

The wells in use in the late nineteenth and early twentieth century were generally less than 70ft deep, sunk into the pre-existing surface soakages. Pastoralists attested that water could always be dug down to in the lower Finke channel, for example, if you sank wells from 8 to 40ft deep into the sand. Otherwise ‘well-sinking is quite a lottery in the north’ as pastoralist HJ Richman stated to the Pastoral Land Commission, with the effort to dig frequently producing only low flows or excessively salty water. The state government Conservator of Water and state Geologist believed that tapping into the deeper artesian water table would provide fresh water, but at that time these waters lay beyond the reach of the drilling equipment that it was physically possible to bring into the area. In 1886 there were only five flowing artesian wells in the colony of South Australia; more had been sunk but they were not productive. The first productive bore was sunk near Hergott (now Marree), dug to a depth of 353 feet with a daily yield of 7000 gallons.

Larger drills soon did become available. In 1901 Gillen gives a full report on the recently completed bores of the area.

April 8th Charlotte Waters Camp 9. John Bailes the Artesian well contractor who has sunk most of the bores in this country arrived this evening form the south he tells me that Anacoora bore lately

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66 Wragge 1886: 626.
67 In foreword to Bridges 1925 [1996].
68 Cronon 1999: 1355.
69 eg Pastoral Land Commission 1891: 110, 123, 124, 128; SRSA GRS 1 1903/33.
70 Pastoral Land Commission 1891: xxvii.
71 Pastoral Land Commission 1891: xxiv, 112.
72 Wragge 1886.
sunk by him to a depth of 1,250 ft. yields 700,000 galls per 24 hrs; the water when flowing from the bore has a temp of 136°. The bore is situated approx. 65 miles east of here and is in desert sandhill country. The bore at Bloods Creek is 2,002 ft. and the water rises to within 140 ft. of the surface, temperature 85°. This well is being fitted with a windmill and tank which when completed will raise the water to the surface. Charlotte Waters bore is 1,474 ft. water rises to within 160 ft. of the surface temperature about 80 fitted with windmill and tank and troughs for watering stock.73

This followed a campaign for more wells south of Alice Springs. In 1892 there was a letter to the newspaper from J Angus, C Giles, MP and W Magarey, Minister for Education, regarding the poor state of the wells on the route between Alice Springs and Adelaide. They argued that the 20,000 bullocks in the region could not be moved to the Adelaide market because of the lack of water. The wells that did exist had inadequate fittings – troughs and pumps – so that it took two to three days to water a mob of cattle, and none of the wells between Alice Springs and Charlotte Waters yielded enough supply. A reliable stock route between Oodnadatta and Alice Springs could only be achieved by opening a line of artesian wells.74 A new trial bore for artesian water was ordered for Charlotte Waters on 19/9/1892. The Engineer-In-Chief of the South Australian government prepared a delicate set of sketches for the construction of the bore, following Laming’s Patent, parts made in Adelaide, in January 1900 for Charlotte Waters bore (fig 4.7).75

Charlotte Waters’ bore is only one of those along the stock route, but its history illustrates the massive investment in planning, labour and money required to deal with the recurring problems of keeping water supplied.

Regular maintenance and inspection of the artesian bores along local stock routes was crucial to their continuing operation76 but problems with maintenance remained intractable. In 1923 Keith Ward, the Government Geologist, reviewed the scope of the problem in his 27 page-long ‘Report on the possibility of providing satisfactory water supplies on the stock route between

75 SRSA GRG53 166/3 Book 93 ‘Windmill for bore’ 25/1/1900: 40-49.
76 Waters on stock routes vol 1; Pastoral Land Commission 1891: 124, 127; SRSA GRS 1 1903/33; AA Series A1640/ Item 92/410.
Fig 4.7: Sketches of Windmills Lamings Patent made by Messrs Ellis and Clarke Blyth Street Adelaide for Blood’s Creek and Charlotte Waters Bores 25/1/1900. SRSA GRG53/166/3 Book 93 Sketch books Property and Survey Branch Engineer-In-Chiefs Office
Alice Springs and Charlotte Waters’. Besides recommending a new bore hole at Charlotte Waters, as the ‘existing borehole has fallen into disrepair’ (it was built in the early 1890s), plus another at 10 miles and one approximately 20 miles NNW, he concluded that the users of the facilities were part of the problem: ‘users of public water supplies are improvident and very careless of the rights of others’, and he recommended some form of monitoring.

An earlier report from the South Australian Engineer in chief to the Minister controlling the Northern Territory regarding the state of the track from Bloods Creek to Charlotte Waters provides a vivid picture of the kind of ‘carelessness’ that Ward referred to, in the context of congestion of diverse users at any single watering point. It tells of the tensions and prejudices that existed amongst them:

from information which I have gathered from the blacks and on travels south and up the track, that [the poor condition of the fences] is largely due to the Afghans with camel teams who camp right up against the wells where in most cases there is little timber for firewood and in consequence they help themselves to any posts which can be easily removed. On the other hand, Afghans with camel teams camping so close to the wells are a great nuisance to the traveling public in this I am speaking from personal experience I have seen 30 or 40 camels hanging about a trough all day long with their loading stacked up more than a chain away and travelers coming to the well with horses sometimes find it impossible to get their horses to drink as they are frightened of the camels and also of the loading … recommend prohibit from camping within half a mile of any well or water hole and in my opinion there is no doubt that the conditions of the buckets is largely due to the manner in which the Afghans knock them about.

Yr obedient servant
EC Grundy 16 March 1903

The new Charlotte Waters bore was built. In 1925 Philipa Bridges, sister of the then South Australian State Governor, on tour on a camel, passed through Charlotte Waters, and described the family of Mr Johnson camped where he was ‘just completing the new well’. The water had to be brought from the bore to the telegraph station on a donkey cart. Rainwater collected from the roof and collected in a large underground tank remained a precious resource,

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77 SRSA GRS 8702/00009/124/09/00031.
78 Ward 1923: 27.
79 SRSA GRS 1 1903/33 State of the track Bloods Creek – Charlotte Waters.
80 Bridges 1925: 164.
however. Travelling ornithologist SA White comments in 1913 that Cox, the
telegraph officer at Charlotte Waters, ‘provided a cup of tea with milk in it
[from the goats], and made from rainwater which is valued like gold in this
country. We will never forget Cox’s cup of tea.’

The telegraph line passed from the Telegraph Office to the control of the Post
Office in September 1924 and there followed a flurry of correspondence about
responsibility for the Charlotte Waters bore. The provision of water for
travelling stock was a duty of the staff. Large numbers of cattle, camels and
horses moving along the route and the Post Office’s own goats and horses
relied on the water. An idea of the constant maintenance involved in ensuring
they did not silt up and the pumps were working and troughs intact, the costs
and labour required, is given in a series of inter-departmental negotiations and
a litany of gallons and flow rates:

24 June 1925 Memo to Post Master General’s Department

... when the surface waters are finished, stock travelling south
water at Old Crown Point, the water at which is very brackish, a
distance of 50 miles, and no further water is available until they
reach Charlotte Waters. The nearest water south is at Bloods Creek
a distance of 33 miles. In addition to providing water for travelling
stock the bore at present provides water for the Postal
Department’s horses (11) and 550 sheep and goats. Other than the
bore the nearest water is at Finke Well nine miles distant. Between
this well and Charlotte Waters the road is very heavy due to drift
sand. The rainfall at Charlotte Waters is most uncertain.

A temporary worker has been employed at 259 pounds per annum
in connection with the bore since 9/4/25 and he has performed no
other station duty as he is required to effect repairs to and keep
engine, pump, and troughing clean when not engaged in pumping
or watering stock. In 2 months 952 camels, 264 horses and 4998
cattle were watered.

From 6/9/24 the date the Postal Dept took over the control of the
bore, to 8/4/25, the following travelling stock were watered – 860
camels, 573 horses 1150 cattle (charged per drink) as well as the
Department’s own stock.

This required 58 hours of pumping, and attending the bore for 16
hours stock watering as well.

It was personally observed on 4/6/25 a string of 76 camels arrived
at the bore at 8pm. and as they had come over a very dry stage it

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82 White 1914: 56.
was necessary that they should be watered on arrival. Again on Sunday 7/6/25 a mob of 546 cattle arrived at the bore at 10am. And as these cattle had previously watered at Old Crown Point, the water at which is very brackish, the watering of these could not be delayed, further there is no feed available at the bore, and for some considerable distance surrounding it, and in consequence cattle cannot be camped at the bore waiting for water.

The memo makes a case for employment of a labourer whose entire responsibility is with overseeing the bore, rather than the postal officers having to do this work in addition to their other duties:

N.T. 25/2623 Memorandum re Charlotte Waters Bore: 17/9/25

The bore is equipped with a 7 horsepower oil engine, pump, two 10,000 gallon tanks and two lengths of troughing laid side by side, each 73 feet long. The bore is 624 feet deep and the water rises to within 140 feet of the surface. The pump is sunk 44 feet into the water and therefore has a pumping depth of 184 feet. The pump raises the water at the rate of 1000 gallons an hour, therefore to fill both tanks would take 20 hours continuous pumping ... a bullock or camel consumes about 10 gallons of water at one drink, therefore, with both tanks full there would be sufficient water to give a mob of 1000 bullocks one drink each. The troughs when full hold about 400 gallons of water and when a mob of cattle is being watered it is necessary that someone should be on the spot to prevent waste. Further in order to keep the pump valves clear of sediment it is essential that the engine should be run for a little while daily, even when the tanks are full.

At the present time stock travelling from Alice Springs to Oodnadatta practically follow the Telegraph Line route. ... any failure on the part of the authorities to maintain a water supply at Charlotte Waters whilst travelling stock are on the road would mean that such stock would have to face a dry stage of about 83 miles. The result would undoubtedly be a very bad smash. The responsibility for which would in all probability have to be borne by this [Postal] Department.83

Within only five years however, the pressure was off Charlotte Waters. In 1930 the Post Office wrote that ‘since the establishment of rail communication with Alice Springs the number of travelling stock passing Charlotte Waters and requiring water has considerably diminished, and the necessity for the retention of a pumper has disappeared.’ Care of the bore was taken over by the Police Department in 1930.84

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84 Memo from Post-Master General’s Department to Department of Home Affairs, 8/9/30 S.A. 323/30, AA A659 1944/1/2894.
The context of this continual effort to provide adequate bores is an official government policy which follows uninterruptedly from the principle of ‘just add water’. There was an imperative, tinged with moral purpose, about working bores, and their increase. Bores were ‘monuments to enterprise’ as ornithologist Captain SA White, collecting and travelling through the country, enthused:  

One can see at a glance what a great boon this artesian water is to the country. These bores are veritable oases in the desert, where the weary traveller can feast his eyes on an abundance of water … the desert cattle can suck at the water all day long and wander far back at night to feed having no fear of the pools drying up … and left to die a lingering death.

The storage of water in the form of vegetables grown in homestead gardens was widely emphasised and admired, part of the evidence for the potential the deserts held. Vegetables grew well in the sandy soil given plentiful bore-derived water, provided it was not too salty. At Oasis Bore homeland Irrwanyere residents planted an orchard and there were on-going plans for vegetables there, and at Anniversary Bore. In 1889 explorer Tietkens describes the cabbages, turnips and cauliflowers of the Eringa station with appreciation. The Federal Homestead garden, with its beds marked out with bottles was impressive. Bingey Lowe remembers it: ‘Federal, that’s a good place. I been in that house many times. One with the bottles; good garden full melon, cucumber, pumpkin. Lots of nanny goats.’ Planting gardens may be seen as a bore-water based parallel to the practice of storing water in the form of grain in a granary on the Finke River, as described by Giles (above).

‘Just add water’ was an internally consistent perspective. It made sense as far as it went; adding more water until variability in supply was ironed out did work

85 White 1914: 39.
86 White 1914: 39.
87 Tietkens 1891: 67.
88 Macfarlane field notebook 20 July 1996.
Fig 4.8: Federal Homestead garden in late 19th century. ‘Old Timers’ collection. Alice Springs Library, no date.

Fig 4.9: Federal Homestead garden beds, 1996.
to an extent. But following a vision of how things should happen made it unresponsive to what did happen, particularly the disconnection of provision of stock feed from provision of water.\textsuperscript{89} In its instrumental push, the approach failed to deal with the gap between expectations and experience of the early applications of pastoral procedures in the arid regions of South Australia. As early as 1891 local pastoralists’ testimonies presented to the 1891 Land Commission hearings reflected their ambivalence. At that time, after 20 years of pastoral activity, there had been no increase in numbers of cattle and sheep for many years, and in extensive stretches of country the would-be pastoralists had abandoned their leases.

The Pastoral Commission summarised the causes of these failures as out-competition by adjoining colonies that ‘enjoyed a heavier rainfall’; the expenses of dealing with rabbits that had rapidly diminished the carrying capacity of the land; prohibitive distance from market with no train or reliably watered stock routes; an underlying mistrust by the pastoralists of the Parliament’s management of leases, plus ‘the omission on the part of the Legislature to offer sufficient inducements for the development of country by searching for water’.\textsuperscript{90} Experienced locals talked of the bush being killed by stocking rather than being ‘improved’ by it.\textsuperscript{91} Nevertheless, solutions to this were sought in terms of greater government investment in fencing and especially in bores.

The continued imperative drive for development through water provision is illustrated by the terms set out for McDills pastoral lease, at Andado to the north of Mt Dare:

Agreement with McDill Bros of Andado re bore leases 8 July 1925\textsuperscript{92}

The Commonwealth Government agreed to sink two bores in the said lands incidental to the development of the Northern Territory.

The State Geologist is to determine the position of the windmill and receiving tanks and troughing and such other equipment as is

\textsuperscript{89} See Ratcliffe 1936, 1937. Specifically: ‘Whenever and wherever pastoral settlement is imposed on semi-desert areas with a variable and uncertain rainfall, the problem of the survival of certain components of the vegetation is automatically raised, and the species that are threatened happen to be those fodder plants on which the stability of pastoral enterprise largely depends; that is the long-lived drought resistant plants on which the stock fall back when the shorter-lived feed fails (Ratcliffe 1937: 24).

\textsuperscript{90} Pastoral Land Commission 1891: xx.

\textsuperscript{91} eg Pastoral Land Commission 1891: 112.

\textsuperscript{92} AA Series A 3280 Item P8420 McDills bore agreement.
necessary or convenient for the proper extraction and utilisation of water from the bore.

Supply of good stock water not less than 7000 gallons average daily to be repaid and maintained by lessees.

The lessee is to keep such bore in thorough repair and order and its equipment (if any) sufficiently oiled and all bolts and fastenings of such equipment tightened up and all tanks properly tarred and will take every other possible care of and give every other necessary attention to such bore.

The terms agreed regarding the continued development of the land revolved around the provision of water – the Commonwealth was prepared to invest in water, promising money in the expectation of returns. But these returns in this area constantly fell below expectations, as the ensuing review of the terms of the McDills lease shows:

The bores were placed in charge of the former lessee from 1 April 1928. The land was resumed in 1935. George Thomas McDill transferred his interest to Robert David McDill in 1938. Only 300 pounds of the rent due were paid by 1926. The lessee has represented to the Commonwealth that owing to droughts and adverse seasons he is unable to pay any further amount in respect of the cost of sinking and equipping the said bores. The Commonwealth releases the lessee from obligation to pay the Commonwealth 5700 pounds. The lessee will pay 25 pounds per annum for use of the bore on the lease to be made concurrently with the rent. The bore is the property of the Commonwealth and the lessee has no claim or right thereto or therein.93

This attitude and policy continued unaltered into the 1940s:

The Government has decided to assist new settlers and particularly returned settlers by providing water on their holdings where adequate surface supplies are not available. The Government will determine the number of watering places to be provided and will bore for water. The cost of all unsuccessful bores will be borne by the Government. The successful bores will be equipped and handed over to the lessee, who will be required to repay the cost involved on easy terms over a fairly long period.94

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93 Extract from the Commonwealth of Australia Gazette 119, 3 June 1943 regarding the McDill lease, AA Series A 3280 Item P8420.
94 AA A431/1 1948/378. Letter 4/9/1946 from Commonwealth Department of Interior to Assistant Manager of Southern Cross Engine and Windmill Co.
**Windmill wars**

This government policy meant that a large number of bores and associated equipment were needed. Providing them was a competitive business.

The windmill is an icon of inland Australia. Although it is such a familiar shape on the horizon, few non-pastoralists think about its explicit function; using wind power to raise artesian water into surface tanks and troughs for stock to drink.

In 1944, Southern Cross Engine and Windmill Co. Pty Ltd of Sydney NSW, the manufacturers of ‘the Rolls Royce of windmills’ as their advertising flyer says, instigated a vigorous two-year long letter campaign targeting the Department of the Interior, Commonwealth Government, Canberra. This was the department responsible for managing government stock routes in the Northern Territory. Southern Cross demanded what they saw as a fairer share of the Department’s business. They claimed that Comet had an unfair advantage, having made a deal with the government earlier, and that an inappropriate standardisation of equipment was being practiced, when instead there should be different equipment for different needs and depths of artesian water. They wrote ‘the Northern Territory is the only part of Australia where Southern Cross windmills have not been predominant, but that position is fast changing. ‘Comet’ were first in the field … owners have used them for so long there is a natural reluctance to make a change. Without change there can be no improvements.’

At the same time, as part of the same principle of boosting the available watering points on stations, private wells continued to be dug into the shallower ground waters. On Mt Dare station, 38 had been sunk by the 1950s, for example. The common pattern of development was for a known existing ‘native well’ or soakage to be dug out by hand and shored as a well. Later an even deeper shaft would be dug nearby with drilling equipment. For example, Bingey Lowe took us with pride to Paradise Bore (fig 1.2b). He dug this well himself with two mates, probably in the 1940s, using a pick and shovel and a

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95  AA A431/1 1948/378.
96  See Appendix 3.
scoop pulled by a camel. They chose a place near the Finke River channel where there was an existing native well. The first two shafts they tried had no water and they had to start again. Later a deeper bore was drilled (fig 4.10, 4.11).

Bingey Lowe reminisces:

Built this long time ago, when a young fella. ... This tank, when this one no water, have this dam down here. I was using that scoop on the ground down there. You got camel in front, or horse, and you come around and hold on, got to be careful all the time or you get [acts out being hit on the chin by the pole flying up. Laughter.] Dig down 100 yard, old Bingey Lowe. ...
That one with the pulleys that’s another bore there, engine on this end, and this is bore with windmill. 2 bores. When no wind, have the engine. I was out here nearly 4-5 months. Hard work digging well. Camped here, just out from tree. No small trees around then, good open country. That was all clear.
So you seen Paradise now.
This bore and that one with cap on, H[?] Smith done them, the bore man, after.
300 feet. Pick and shovel all the way until you finish. And windlass (acts turning handle of windlass) on top. Man go down there and fill up the sand and water mix. Whip wheel with camel or horse to pull it up. Empty one goes down, full one up. That’s what you call ‘whip’. Everybody young fella, you know. Just working. Happy. As long as get enough bullock meat!
You can go round and take a picture after lunch.

Paradise Bore 28 September 1997
Transcript of video recording

Attachment to such a place is palpable in Bingey Lowe’s personal history of labour and involvement. This construction was a historical modification that simultaneously left its imprint on the builder as much as it changed the land. 98

98 See Bradley 1993.
Fig 4.10: Paradise bore fittings. September 1997

Fig 4.11: Scoop dragged by horse or camel in digging the Paradise well. 1997
The labour of Indigenous people built the bores and associated stockyards and worked the cattle. But only a minority of them were supported by the formal station economy or rations. For most, the impact of cattle and rabbits on the limited, richer parts of the landscape and overall reduction in diversity and productivity of the land between, meant increasingly restricted access to the full range of potential water sources and livelihood of the area, either because they were occupied or depleted. 

For Aboriginal people not directly employed on the stations there were few choices, especially when there was a drought: either move off to other stations for work or for rations, or base themselves at remote wells and bores. The terms of land leases in South Australia allowed for Indigenous peoples’ unimpeded access to lands, including ‘springs and surface waters’ and ensured the ‘unobstructed right’ to ‘use, occupy, dwell on and obtain food and water’ from the land. The people who informally lived at the latter were opportunistic occupants, not employed by the station, out of sight, their presence not officially sanctioned. In Michel de Certeau’s terminology, they were practicing la perruque, or ‘poaching’. That is, they were ‘re-introducing’ techniques drawn from their previous experience and knowledge into the new order of the pastoral industry. They utilised the standing infrastructure of water provision at no cost themselves, but with no accumulated gain to themselves either. Kimber’s discussion of ‘claypan squatters’ indicates that both Indigenous and non-Indigenous people lived on these margins of the stations. The terms of their exchanges were mixed, but Indigenous men and women again provided labour, working possibly for themselves, possibly for, or with, the smallholders, and at least some Indigenous women were sexual partners to white squatters.

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99 Pastoral Lands Commission 1891 testimonies of FJ Gillen, AD Breaden, WG South 1891: 112, 125, 127.
100 Smith and Morton 1990: 271.
101 Foster 2000: 15-16.
102 See Foster 2000 on terms of leases.
103 de Certeau 1984: 25-6, 30, 36-7.
In order to explore the local details of particular interactions between people with each other and with water places in this context of a pastoral landscape, I have focused on two contrasting local examples: Anniversary Bore and Dalhousie Homestead.

**Associative clustering at Anniversary Bore**

Bingey Lowe’s selected a difficult-to-access spot on the lower Finke for the location of a new Irrwanyere homeland where he would live in 1997. His reasons behind his choice are revealing. He was influenced by strong past associations with a cluster of structures and the people’s stories that they held, located nearby. Firstly, he had spent many nights looking after the cattle in the yards he helped build beside the newer Anniversary Bore (probably in the 1950s). Secondly, these yards stand near an earlier whip well, known as Taylor’s Well, after Dick Taylor, Harry’s father, who lived there with his family off and on in the early twentieth century (fig 4.12, 4.13). Bingey Lowe remembered stories of them and their flattened kerosene tin dwellings. Archaeologically, their residence is remembered in a characteristic mixed assemblage scattered over a compacted area of sand, including twisted wire, clay pipe stems, tobacco tins, a liniment jar, a teacup fragment, olive glass ‘Pick axe’ beer bottle (dating between 1912 and 1921¹⁰⁵), a saddle pommel and hobble chain, food tins and two metal wash tubs. Sixty metres away was the goat yard, with the dunes rising behind them. A grave marked by wooden posts lies to the east. Prior occupation of the area is attested to in the scatters of stone artefacts recorded on the sandy ground.¹⁰⁶

Thirdly, the area’s associative cluster for Bingey Lowe continued with a ‘stud yard’, a basic form built from posts driven into the ground close together (fig 4.14). This is close to the nearby Ewillina water hole, narrow and steep-sided, which can stretch to four miles long. There is an unusually rich scatter of pre-colonial material in the form of numerous grindstones, varied flaked stone artefacts and well-preserved non-introduced animal bone. Finally, the powerful Ewillina Carpet Snake ceremonial place lies on the other side of the waterhole. It is marked by many stone arrangements on a low gibber covered rise – lines.

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¹⁰⁵ Reed 1977.
¹⁰⁶ Macfarlane field notebook Friday 3 October 1997.
Fig 4.12: Bingey Lowe, Harry Taylor and Deane Ah Chee at Anniversary Bore, October 1997

Fig 4.13: Stockyard at Anniversary Bore, October 1997
cairns, upright stones, circles. Bingey Lowe was a custodian of the songs for this place.

An important question here concerns whether there is a difference between organising life around a technologically derived water point and basing it around an autochthonous, long-term water hole or well? They have different ontologies – a different status in the world. For one thing, new water points have no direct reference within the stories of the Ancestors which weave the country together. However, it seems that, through usage, the area’s stories have informed the various additions by association. The additions have been incorporated as elaborations of an already extant focus in the landscape. This has ameliorated their potential contrast in status. An additive process can be identified. Novel forms that were congruent with existing landscape elements that already ‘made sense’ were able to be taken up within the corresponding set of ideas and practices.107

Anthropologist Bill Sillar talks of ‘technology as philosophy’.108 He makes the strong point that ‘technological traditions are fully embedded within their cultural and historical contexts’.109 He uses the example of the primacy of weaving in Andean society, which is a kind of theme or metaphor for appropriate ways to do things: so people weave and tie wood, rather than cut and nail it, and developed the quipu notation system. These underlying metaphors run through all aspects of the lived world, and affect choice of what will be construed as appropriate technology.110 And so novel technologies which are construed as congruent with what already ‘makes sense’ will lead to their incorporation: conceptual links make transfer of technology possible.111

In this case, it can be argued that people’s prior experience of wells and their maintenance was congruous with the establishment of the new bores.

107 Anthropologist Howard Morphy, talking of his experience with Yolngu people, says that identification of country can be stretched, based on extension to places with similar form. Even where people have died and the knowledge of a place is attenuated, such extension allows them to act properly, if uncertainly. They are ‘continually interpreting signs in the land that could link it with the mythological past, which … remained very much part of its present’. This is a mechanism for recreating linkages. It is not a reinterpretation, but a process of discovery or revelation (Morphy 1995: 184, 186).
network of new bores unintentionally replicated the pre-existing pattern of known water points and flexible movement between them. The cattle industry ‘worked’ here, and was able to endure, because of the congruence that existed between their management with already well-established practices and knowledge. Indigenous people who provided the knowledge and labour that kept the cattle industry running could continue to visit the important places in their country and teach it in their language.  

As part of establishing the new ‘homelands’ at Anniversary Bore (as well as at Oasis Bore, and the tourist camp ground at Three O’Clock Creek), in addition to rain water tanks, new bores with solar panels to run the pumps, were sunk at each (fig 4.15). In an example of the two-way relationship of agency between waterplaces and people discussed above, Bingey Lowe described his plans for a garden and chooks: ‘black ones, like me! I like black chooks they have the most eggs’, and camels – he wanted to put out a trough so dingoes and camels could come and drink. The residents at Oasis Bore had planted a grape, fig, passion fruit and gum saplings, and a lawn under shade cloth (fig 1.8). They had provided a water trough for the birds to drink from (fig 4.16); there was now a bounty of water and food for all to be shared on the western edge of the Simpson dune field, and no need to trap the birds now.

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112 They had legislated access rights to the land under the terms of the pastoral leases (see Foster 2000: 13). In the Dalhousie Springs lease, issued 1/5/1873 it excepts from the lease given ‘for pastoral purposes’ ‘out of the said to the aboriginal inhabitants of the Province and their descendants during the continuance of this demise, full and free right of ingress egress and regress into upon and over the said Waste Lands of the Crown hereby demised and every part thereof and in and to the springs and surface water thereon and to make and erect such wurlies and other dwellings as the said aboriginal natives have heretofore been accustomed to make and erect and to take and to use for food birds and animals ferae naturae in such manner as they would have been entitled to do if this demise had not been made … SRSA GRG 3570/1/42 Lease No 2213 Issued under Waste Lands Act of 1867.

McGrath (1987: 106, 158-9) discusses the maintenance of traditional life and associations to land in the Northern Territory cattle industry.

See Ferguson 1991: 29 regarding cultural incongruity, Head and Fullagar 1997 regarding congruity.

113 Macfarlane field notes 29 October 1996.

114 Macfarlane field notes Tuesday 9 July 1996.
Fig 4.14: Stud yard near Ewillina waterhole and Anniversary Bore, October 1997

Fig 4.15: New tank with solar panels at Anniversary Bore, October 1997
Novel forms of objects, or in this case, of water provision, can be assimilated into existing categories and in the process they may create a new order, a changed context; one which has a doubled quality of mobilising prior conditions, at the same time as introducing novelty and distinctiveness. The way they are used, grounded in prior experience, twists and extends the meaning of the water places. The domesticated water of a bore, in this area at least, becomes neither a pure object of European permanence, nor one of Indigenous mobility.

Whatever grief and hurt was felt at the trampling of waterholes and springs by cattle, and the disruption of access to them that was suffered in the process of these reconfigurations was not captured in the texts, nor in the reminiscences I was told. However, the available texts do provide a glimpse of duress experienced by some managers of the Dalhousie Springs station, below. The springs had no voice, but the declaration of the Witjera national park in 1986 was a recognition of need for an altered land use, made in the context of shifting land values in the 1970s which favoured conservation. The Dalhousie Springs were eventually included on the National Heritage List in 2009 for their ‘outstanding heritage value to the nation’. It is 25 years since the cattle were removed from Dalhousie/Mt Dare station, and the increasing numbers of tourists are now managed so that the ecological diversity of the Dalhousie springs and water holes may recover.

115 Thomas 2002: 196.
Fig 4.16: Water trough at Oasis homestead with Zebra Finches drinking, 1996
Dalhousie Homestead: a case of mistaken identity

Dalhousie was the earliest established station homestead of the region. It was built in the 1870s from the local limestone, at the southern end of the Dalhousie Springs. There are no direct records of the intentions of the original lease holders in their choice of location, but all the indications point to their choice being a case of mistaken identity: the ‘singular spectacle … welcome sight!’ of the first sight of the springs by the Overland Telegraph Line surveyors in 1870\textsuperscript{118} was over-optimistically misinterpreted. The original lease title captures the focus of this hopefulness evocatively. It shows the 10 miles by 10 miles of the leasehold centred squarely on the springs. These are depicted with a pen and wash picture of green reeds (fig 4.17a, 4.17b).\textsuperscript{119} A descriptive newspaper article from 1905 clearly articulates this perception of the springs as central:

> The huge natural reservoir is situated almost in the centre of the run, and the stock can patronize it from all points with ease, while in lean seasons the reeds and rushes are their main subsist.\textsuperscript{120}

The solid homestead was built according to a set of imported expectations that valued permanency, fixity, and tried to construct it on the promise of the apparent abundance of the springs. Like the call for more bores, however, the vision of the springs’ potential was a selective one. It did not attend to the context – the saline and erosive sediments that turned into a bottomless bog after any rain, and their isolation. As Mike Smith points out that the presence of permanent water is not sufficient in itself to sustain occupation. It is the density of water sources that are accessible that counts, and the resource base which they support.\textsuperscript{121}

\textsuperscript{118} C. Giles 1894 3(3): 21.
\textsuperscript{119} SRSA GRS 3570/1 unit 42 Lease No 2213.
\textsuperscript{120} *Adelaide Observer* 23 9 1905 cited by Kimber 1992: 123.
\textsuperscript{121} Smith 1989.
Fig 4.17a: Dalhousie Springs station lease, No 2213 issued under the Waste Lands Act of 1867, 1/5/1873, SRSA GRG 3570/1/42

Fig 4.17b: Dalhousie Springs station lease 1873, detail
Attempts were made to irrigate with the water, unsuccessfully (fig 4.18) and hopes for the potential of the bounty of the water persisted:

I have been out with Mr Hill the Botanist of the [Barclay exploring] party through the Springs. He says the water from the hot spring would grow anything – especially lucerne. – there are a few nice flats that the water could be drained onto – Of course it would need making rabbit proof. He also says that cocoanuts would grow splendidly. If you would send me two or three cocoanuts and some lucerne seed I will plant them out there. ... If this would grow and be a success it would be a great thing, and could be carried on with very little expense.

I will send you some lucerne seed up but I doubt very much whether you will get much out of it, because the soda in the water will be rather too much for the lucerne seed. The same remark would apply to your garden. You want to keep changing the locality every season.122

The springs were a regular watering place on the stock route in the late nineteenth century, with accounts of many mobs of sheep and cattle coming in from ‘dried out’ stations for water, as a last refuge for stock, even though the feed around the springs was eaten out.123 Drover Allan Breadon describes successive droving parties plus a party of Lutheran missionaries, en route to Hermansburg to establish the Finke River Mission, all ‘hung up’ at Dalhousie due to lack of water for their travelling stock in May-June 1876:

... Dalhousie Springs. The cattle mob had got a couple of days ahead of us and had already been let go in the big springs to Flounder about. 20 miles of High Reeds. The Lutheran Mission party were also camped there and had been there some time camped on a spring on the West Side of the main road. All the big springs being on the east side of the road. The Mission Party were bound for the Finke River to form what is now the Hermansburg Mission Station and like the rest of the parties were hung up until rain come. Their stock were mostly sheep a few head of cattle and Horse to draw their wagons. There was over 16 Hundred cattle on the springs and a few months later the Aringa Station 35 miles south west of Charlotte Waters had to shift their cattle on to Dalhousie Spring. The big main water hole at the Station was almost dry. A fish was caught in this Hole at low water that its weight 22 pounds. About the first week in May we had about 1 1/2 inches of rain and our General Manager Mr RE Warburton rode North. He came back in a few days and reported Bloods Creek had run and filled Hughes Hole but from there on only shallow claypan

122 PRG 247/11. Letter from Dalhousie Springs Manager FC Reid to leaseholder J Lewis 15 Feb 1910 and reply from Lewis 9 April 1910.
water. This cut the stage to Finke Crossing down to 90 miles. The Drover got orders to start muster at once as most of the cattle were out on the Tableland. He was to pick up all the cattle he could get handy and start on. He got away with about 600 leaving about 160 behind … 124

Archaeologically, on the flats to the west of the homestead, where they are out of sight, we recorded at least 35 burnt limestone hearths, 0.5-1m in diameter. Four of these contained burnt bone, all of which was from cattle. These were surrounded by a dense scatter of nineteenth and early twentieth century ceramics, tobacco tins, ointment jars, an axe head, buttons. There was a kerosene tin modified to hold a fire, and a wash tub with square holes punched in it (with a pick?) presumably for use as a shower. These hearths, distributed in a patterned 5m or so apart, are interpreted as the remnants of regular camps by transiting stockmen and possibly Afghan camel train drivers (fig 4.19- 4.21).

It may have had permanent water, and been famous for the horses bred there, with its own racetrack.125 But the view from the door of the homestead was bleak (fig 1.16). In 1913, ornithologist S.A. White visited the homestead, and recounts stories of one Manager’s wife stationed there being driven nearly mad ‘with the fearful solitude, the inexpressibly uncanny aspect of the country, and the graves of former residents always before her’. Another former Manager found that ‘the depressing aspect of the place “got on his nerves”’ to the extent that he ‘sat and cried like a child’.126

124 Breadon, Allan D. ‘Reminiscences, 1875-1893’, ML MSS. 953 CY Reel 1765 [no page numbers]. See also Scherer Venture of Faith 1975 [1963]: 40-1. The missionaries were trapped at Dalhousie Springs for almost 11 months.
126 White 1914: 42, 44.
Fig 4.18: Abandoned agricultural machinery at Irrwanyere spring campground, 1997
White’s impression of the ‘badlands’ setting of the homestead, immediately surrounding the green of the spring’s palm trees, reeds and pool was most unfavourable. For the Indigenous people forced to reconfigure their lives around the intervention of the pastoral enterprise in their springs, however, it was the homestead that was the source of dislocation. Looking at the contemporary ground surface shows spatial distinctions in the rich lag deposits accumulated through time which surround the homestead. These give evidence for some of the details of the form of these reconfigurations.

Just out of line of sight from the homestead, under a low ridge 600m west of the homestead was a cluster of nine stone circles, which are interpreted as the bases of huts or wurleys (given as ‘iltha’ in Lower Southern Arrernte in Gillen’s Charlotte Waters language list) (fig 4.22 - 4.24). These are associated with twentieth century ceramic fragments, a metal pannikin, several clay pipes – objects which reference those key elements of rationing and products of empire - tea, sugar, tobacco. There is even a washtub in which to bring water to this remove from the springs. There is a dense background scatter of a wide range of stone artefacts and of flaked glass: discarded whiskey bottles, imported to Adelaide from Glasgow and then brought 200km from Oodnadatta on a camel in the late nineteenth century, were redefined as a raw material for flaking (fig 4.25-4.27).

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128 PRG 54/2/1-5 [Rough] notebooks kept by FG Gillen 1901-2. ‘Fragments of native language as spoken at Charlotte Waters’.
Fig 4.19: Hearths north of Dalhousie Springs homestead

Fig 4.20: Hearth north of Dalhousie Springs homestead
Fig 4.21: Wash tub with holes for shower north of Dalhousie Springs homestead
Indigenous people were employed on the station.\textsuperscript{129} Large numbers of extended family, probably about 50, camped on the margins of the main homestead, which was a ration station until 1921.\textsuperscript{130} A photograph of their camp was taken in 1919, empty of the people and dogs who lived there; a still and quiet museum piece (fig 4.28). Comparing the background in the photo, these are likely to be the same huts as those we recorded archaeologically in 1997, enlivened by the associated materials.

\textit{“The Dalhousie blacks are making rain today and the creek will run tomorrow.”}

‘The Dalhousie blacks are making rain today and the creek will run tomorrow’ is one of the sentences recorded on wax cylinders by Baldwin Spencer in March 1901 as a sample of Lower Southern Arrernte.\textsuperscript{131} The inclusion of this resonant phrase may suggest that the holding of a Rain ceremony by the people based around Dalhousie homestead was a current topic of conversation amongst the men he met at the Stevenson River. They were still performing ceremonies near the homestead in 1913, witnessed by the visiting ornithologist White. A large group of men and women, and dogs, were gathered, chanting, accompanied by tap sticks through the night, and on previous nights. White was told the ceremony was to mark a secondary burial, and those participating had gathered from Crown Point to Charlotte Waters – Lower Southern Arrernte country – at this southern spring.\textsuperscript{132}

After a life-span of 50 years providing what emerges as a tough and remote base for the pastoral operations of the springs, Finke floodout and stony tablelands, Dalhousie homestead was abandoned. The base, and the ration

\textsuperscript{129} Foster 2000: 12.
\textsuperscript{130} SRSA GRG 52/26/1. There are no systematic figures of the number of Aboriginal people at or near Dalhousie Station, only sporadic references: In 1898 a former manager complained that Dalhousie Station ‘only employed blacks’, and two white stockmen (Foster 2000: 17). In 1911 in letters between manager Reid and leaseholder John Lewis, Reid writes ‘The Blacks have all cleared out and I am now left without boys or lubras. One reason is they are scared of another tribe’. (May 10 1911 SLSA PRG 247/11). In 1921 Dr Herbert Basedow reported that there were 15 individuals at Dalhousie Springs, 8 at Bloods Creek and 13 at Federal homestead in 1921, and approximately 300 people in the central settled districts of northern SA between Hergott Springs and the NT border (AA CRS A3 item 22/2805).
\textsuperscript{131} AIAS Archive No 9206, recorded from wax cylinders, Cylinder No. 12, no date or location given in introduction, but follows from cylinder 11 which was ‘Sung at Stevenson River, March 22nd, 1901 by a member of the Arunta tribe’.
\textsuperscript{132} White 1914: 45-47.
station, was shifted away from the mound springs to a good bore and water holes on Abminga Creek, the current location of Mt Dare homestead. Bingey Lowe remembered that as stockmen [in the late 1940s?] they ‘camped there, in the kitchens, smithy and big house, still had roof on, we went in in rain times’ and continued to use the stockyards.

The presence of permanent water was not sufficient in itself to sustain permanent occupation; a one to one match of the two elements did not follow. However, the descendants of the people of the area who camped on its margins are living there still, now Rangers in Witjera National Park (fig 4.29): an enduring presence.

In both of these examples, Anniversary Bore and Dalhousie Springs homestead, the story and the ethos of ‘digging deeper’ and of ‘moving on’ through a subsistence geography that is also sacred co-exist. Although starting from distinctly different understandings of relations to water, the sets of associated practices borrow from each other. They become entangled. They emerge not as mutually exclusive and successive stages, but as simultaneously implicated in the way all people now live in the region.

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133 The ration book heading for 1921 says ‘Dalhousie Springs now issued at Mt Dare’, an alternative existing station. SRSA GRG 52/26/1.
Fig 4.22: Plan of the cluster of hut bases 600m west of Dalhousie homestead, showing low rise and locations of stone bases (indicated by U)

Fig 4.23: One of the hut bases, November 1997 (scale = 30cm)
Fig 4.24: Looking east towards Dalhousie Springs homestead from the cluster of hut bases, November 1997

Fig 4.25: Wash tub on the ground surface close to the cluster of hut bases, 1997
Fig 4.26: Clay pipe associated with one of the hut bases, 1997

Fig 4.27: Flaked Glasgow whiskey bottle base on the flats north east of the hut bases, 1997
4.28: Photographs of Aboriginal huts at Dalhousie homestead, T Gill 1919, Royal Geographical Society of South Australia collection, Adelaide.
Water to think with

The Irrwanyere Aboriginal Corporation took their name from Irrwanyere, the name of a large hot spring of the Dalhousie group, which is a healing spring, both generative and regenerative. People with lung problems would bathe in its steamy 36 degree water, ringed with melaleucas and noisy with galahs and waterbirds, small fish nibbling the hairs on their legs. They also infused ‘minty bush’ leaves in the hot water. The Irrwanyere Aboriginal Corporation have chosen to identify themselves with this core place and its associations (fig 2.13).

Each of the other more than 60 springs in the group has its own qualities and relationship to people’s lives. They vary in size, temperature, mineralogy. Each is named. Some must be avoided, some were for drinking or fishing, some were swum in by all. They were associated with differing Ancestral actions. The springs are the meeting place of numerous Ancestral lines of travel and actions: Perentie (Irunpa/Ngintaka), Dingo, Cadney Lizard (Angkarda), Kingfisher (ldnjundura) and his sons the Two Boys, the Rainbow Serpent, and others.

As Deborah Rose summarises it, ‘most of the “really important places” focus on water’, and these are often ‘places where a number of Dreamings meet up or cross over’, as they do at the Dalhousie Springs. ‘Water, according to Indigenous accounts, does not happen by chance, but rather exists through the creative action on Dreaming beings.’

On a hot and cloudless day in October 1996, we have two Toyotas taking Irrwanyere members to visit various others of the springs in the area. First we go to Duck Spring, where Bingey Lowe used to go fishing. There is a dense curtain of reeds, behind which lies a large expanse of green, cool water. An old vehicle track to the pool is now indented below the surface, like a creek bed. The surface around the springs which we drive across under Bingey’s direction is hard and compacted. Bingey uses trees and the relation, the shape of the path

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139 Rose 2004: 36.
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between them to navigate, re-locating springs he has not been to since the 1960s, despite his cataracts and the changes in the vegetation and land since the cattle were taken off in 1985.

Next he re-located a hot, blue green spring with bubbles rising from deep below and effervescing on the surface. He explains that this is due to a firestick, put into the pool where mosquitos went in; it is this which makes the spring hot.

Ilypikwa is the bubbler spring. Here is where Ancestral children were drowned after they teased the Perentie, ‘laughing at him, te he, and touching his feet, he say ‘leave me alone’, and drowned them. You call out to them and they rise up, the bubbles. Men women and children used to swim in that one’ Bingey says. There weren’t any reeds there in the 1960s, eaten out by the cattle. He checks to ensure we know the story - we repeat it back to him.\textsuperscript{140} Rossie Finn’s auntie was born here, and I see a broken clay pipe, glass fragments and old tins on the surface where people were camped in historic times. These are mixed with the dense scatter of pre-colonial stone artefacts on the sheet-eroded surface around the springs: grindstones, many flakes of chert, silcrete and quartzite, and formal flaked tool types - adzes and microliths.

\textsuperscript{140}Macfarlane field notebook 28 October 1996.
Fig 4.29: Irwanyere Ranger’s camp at Irwanyere Spring, 1997
At the southern end of the group, near Dalhousie Homestead ruins, is a cluster of low hills covered in dark ironstone. The mound springs there are associated with the *Angkarda*, or Cadney lizard, on his way north into the Northern Territory. These springs are also surrounded by stone artefacts - grindstones, hammerstones, flakes and adzes, plus some animal bone fragments, and broken bottles and a clay pipe bowl. There are heat-shattered stones from hearths, with burnt emu eggshell in one of these. ‘The old people who lived around Dalhousie homestead used to spend time here.’

The Kingfisher Spring *Idnyundra*, is a freshwater spring, the agreed source for the new campground near the Irrwanyere spring. The Two Boys leave from here to cross the Simpson Desert east to Goyder’s Lagoon, their mother following with a dish full of water. The surfaces around it are densely covered by a scatter of finely worked stone artefacts, flaking debris, grindstones fragments, and historic glass fragments. These are evidence of its long term and repeated use from pre-colonial to historic times. The Rainbow Spring (fig 4.30, 4.31) is also fresh water, but is dangerous because of the Rainbow Serpent coiled within it, and was not, and is not, a source of water.

Through the lens of water, we see white explorers’ and pastoralists’ interests in water revealed as unitary and instrumental, directed towards making water as predictably and regularly available as possible. Their expectations of it are retained, despite experience, in a mode which disconnects water from its environmental and historical context, from the wider needs of other plants and animals.

**Conclusion: Bingey Lowe’s Polaroid photographs**

In 1998 Bingey Lowe asked me for a Polaroid camera. He wanted it so that he could take pictures of the waterholes in the country he speaks for. It was the second year of big summer rains and the country was green, the waterholes full (fig 4.32). We went to Lalkara, or Eternity waterhole, on the south-western edge of the Simpson dune field. This is the picture Bingey took of that water (fig 4.33). There are no people or birds in his picture, only the waterhole, filling

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141 Nicholson and Irrwanyere Aboriginal Corporation 1999: 16.
143 Macfarlane field notebook 31 October and 5 November 1996.
the horizon of the photograph. To my eyes it shared the formal simplicity and informed intensity of one of Rover Thomas’ paintings. Like Thomas’ images, it captures the connections and affinities with the land. It does not ‘simply depict the surrounding geography, but instead embraces its entirety through the spirituality of the Ngarrangkarni (Dreaming) and the events of the physical world’.

As discussed above (page 12), Bingey Lowe regarded photographs as proof – not just of the existence of the thing photographed, but of the occasion of the photographing, in this case our visit at a time of plenty. In his making a proof or record of water, I read an assertion of Bingey’s attunement to the extreme dynamics of water and its crucial implications for living in that country.

Water is good to ‘think with’ rather than just ‘about’ because it is vital in the dual sense of being indispensable to life, and also invoking the presence of life, being ‘full of life or activity’, as the Oxford English Dictionary defines it. It is ‘the source of all possible existence’. Living water flows in the Bible and in Australian Indigenous understandings of water.

All water is not the same. Its form and the history of peoples’ interactions with it, stories of it, are important in distinguishing one place from another. Acquisition of water for practical use necessitates engaging at the same time with elements of its accumulated histories and meanings – it cannot be separated from its context.

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144 Macfarlane field notebook 12 June 1998. Rover Thomas was an East Kimberly stockman whose art, based in his knowledge of country, its form and Ancestral and human history, was internationally renowned. His life spanned approximately the same times as Bingey Lowe’s (brief biography of Thomas given in the National Gallery of Victoria http://www.ngv.vic.gov.au/rover_queenie/rover.html accessed 20 January 2010).
147 Strang 2005: 105.
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Fig 4.30: Rainbow Spring, 2007

Fig 4.31: Drawing of the Rainbow Spring by Dean Ah Chee, used on the interpretation sign at the Irwanyere spring camp ground, 2007
Fig 4.32: Lalkara waterhole full, at Eternity Bore, 2008

Fig 4.33: Bingey Lowe’s Polaroid photograph of Lalkara waterhole, 1998
To think about water as generic, as a resource, and to stop there, is to stop too soon. A ‘resource’ is more than a substance separable from its context. As well as providing basic requirements, it has a history and is an historical actor. It acts as part of the network of relationships through which people’s lived experience constructs a meaningful world. There is not a clear binary division between water as a natural feature as opposed to objects which are cultural – water is cultural, not simply because it can be controlled and modified, but because it is woven into people’s understandings of the world. A historical perspective on the specificities of people’s relationship with a particular body of water through time allows a deeper appreciation of the dynamism of these relations, and how prior practices contribute to contemporary patterns.

Water places assemble memories and encourage renewal, not simply of bodily needs but of stories and connections, of identity, of the past, and of future possibilities. This sense is captured in Bingey Lowe’s photograph, and the act of his taking it, at an intimate scale. ‘Water’ is not just for drinking, but for thinking with.