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BECOMING-FROG

Learning place in primary school

Early morning walk with dogs past the roundabout on edge of town. At roundabout world of suburban houses opens out and a wonderful big puff of cloud is licked pink from sunrise against a clear blue sky. But as the street opens on the view I see the eight chimneys of the power station, two by two by two by two, with thin trails of umbilical vapour connected to the big cloud. It's a power station cloud. I run back home to get my camera, worried that by the time I get back to this spot the blush will have gone. Dogs running, camera slung around my neck, only a few minutes—and yes, it has changed. Pink tinge gone, it is lit bright in early morning sun, more normalised, a white daytime cloud in a bright blue day. I have to take a photo so you will understand. Space, place and time, weather, climate change, culture and nature, the significance of that moment of representation.

The Commercial Road Morwell Primary School (hereafter the Primary School) is located in the heart of Latrobe Valley, in the Gippsland region of eastern Victoria. When climate change was elevated to national and global importance following the Stern Report (2006) and the Garnaut Report (2008), the iconic towers of the coal fired power stations of Latrobe Valley came to symbolise the evil of carbon emissions. The dominant storyline of climate change and identity in Latrobe Valley is one of “double exposure” which refers to:

...the fact that regions, sectors, ecosystems and social groups will be confronted both by the impacts of climate change and by the consequences of globalization...there are “winners” and “losers” associated with both of these global processes. Climate change and economic globalization, occurring simultaneously, will result in new or modified sets of winners and losers. (O'Brien & Leichenko, 2000, p. 222)

The sense of double exposure is well encapsulated by a storyline in the *Latrobe Valley Express* (Wragg, 2008, p. 8).

The underpinning reason why Latrobe Valley voters turned their backs on local sitting ALP members at the last State Election is the lack of action by the Bracks-Brumby governments to ameliorate the destruction of our region's economy. Destruction that was caused by successive Labour and Liberal

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governments who sold off the SECV [State Electricity Commission of Victoria] with a direct loss of 8,000 jobs and an indirect loss of another 12,000 jobs in Gippsland...As our regional community stares down the barrel of climate change impacts, the economic and employment consequences of [the] carbon trading scheme on the energy industry, and the manoeuvring of private power companies to force and capture government compensation without regard for the welfare of the Valley families, we have yet to hear how and if the Brumby Government intends to support our community through the anticipated tough time ahead.

The processes of economic globalisation have previously had a marked effect on Latrobe Valley communities through the privatisation and automation of the power industry. Along with the loss of jobs came the loss of working class identities. A proud history of labour was replaced by intergenerational unemployment, poverty and hardship. Overlaid on the storyline of earlier experiences of victimisation, the new story repeats the victim storyline in the context of a carbon constrained future, even though this is not necessarily the outcome.

The public representations of post-industrial regions powerfully link place with identity. Dominant storylines of the Latrobe Valley are of socio-economic disadvantage alongside environmental pollution, reinforced by daily television images of Latrobe Valley smoke stacks emitting greenhouse gases. These storylines depict disaffected young people with behaviour problems, criminality and idleness. Life becomes inescapably linked with pollution, as increased attention to climate change and global warming brings a new pathology to the region. These storylines operate as public pedagogies, they not only describe, but also produce knowledge.

Young people in such regions are living in pathologised places and they too are pathologised. Of particular concern are the numbers of young people affected by the increasing prevalence of discourses about youth behaviour problems. Research by Harwood (Harwood, 2006; Harwood & Rasmussen, 2007), for example, has shown a correspondence between high levels of socio-economic disadvantage and high rates of Attention Deficit Hyperactivity Disorder (ADHD) diagnosis. Harwood's study in the Gippsland region identified how young people experience pathology in a number of ways: identity of the region, youth unemployment, low educational attainment, high levels of behaviour problems and behavioural disorders.

The case study reported in this chapter seeks to understand the positive identity-shaping possibilities for children learning place in Latrobe Valley through activities arising from a partnership between the power company, the Primary School, and the Morwell River Wetlands.

THE MORWELL RIVER WETLANDS PROGRAM

Walking out of the scrub at the edge of the playing field there's a big puddle of water lying since recent rains. My heart rises the first time I see this water appear after drought. The second time there is already an amazing chorus of frogs. My son tells me they sing in unison so the females can choose a mate. But where do they come from? And where do they go? There have been no

frogs singing since that first day at dawn. Why aren't they singing? Is it the time, or are they all gone again? It's Sunday morning so I wander over to the little wetland again. I think about knowing a place day in and day out, over seasons and years to really know what is going on, I think about how places teach us.

It was on a visit to a student on practicum placement that I entered the world of frogs. I had visited the crowded portable classroom earlier in the day and watched the children navigate desks, chairs, boxes, hanging artworks, and other objects that make up this decidedly working class primary school classroom. I thought about Lefebvre's contention that the whole of social space proceeds from the body (1974/1991). The social space of this classroom is produced by these movements, bodies and objects, producing, in turn, the subjectivities of the children there. My attention was especially drawn to Mary, a child with Down Syndrome, moving awkwardly in this cramped space accompanied by an integration aide. It seemed that there was just nowhere she could fit in this crowded space with her extra human attachment.

When I returned after school the teacher and the integration aide, still working in the well-worn classroom, invited me to watch a short DVD of the rehearsal for the Christmas concert. There on the interactive screen, the children came to life as frogs, dancing their frog dance to music made entirely of frog calls. The children get to know the frogs in the wetlands. They learn how frogs live and move, and the sounds of the distinctive calls of each species. The classroom, cleared of clutter becomes the space of the wetlands. Children dance to frog calls, moving frog limbs, fingers splayed, jumping, leap frogging, becoming-frog to frog music. Mary, in particular, loves the performance, moving freely in this frog collective, unaccompanied by her integration aide. In one brief sequence towards the end she smiles pure pleasure at the camera, her body liberated in her frog dance. I learn that this is just a very small part of an integrated program involving visits to the local Morwell River Wetlands.

The Morwell River itself is an interesting phenomenon. Over fifty years ago it was diverted into a pipe for the open cut coal mine. Aboriginal artefacts on display in the reception area of the power station tell a story of another time when Gunnai people sang, danced, camped and ate by the river. This year the open cut mine will be extended again. In this move, as reported in the local paper, we will have an 'improved river and an improved road'. The river will once again be diverted to expand the coal mine. This time, however, it will be liberated from its pipe and returned, according to the planning map, to a river's meandering curves. The Morwell River Wetlands are part artificial, part natural, constructed by International Power, the British Company who now own Hazelwood Power Station. The wetlands is in the original location of the overflow from the river, alternately wet and dry according to the season. Constructed by a mining rehabilitation engineer, it has pools and banks, swathes of trees, logs and dead timber, for creatures to inhabit. The school has a special relationship to the wetlands and has monitored its evolution through the frogs,

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native trees, shrubs and grasses, and other creatures large and small who have come to inhabit this place.

Shortly after the wetlands was developed, three local schools applied for a Science in Schools grant and received twenty thousand dollars to set up a study of the wetlands and develop a curriculum model. Regular visits to the Morwell River Wetlands are a key feature of this curriculum for the Primary School in Morwell. The Morwell River Wetlands program is integrated across all grades in the school and across all subject areas. In the early grades the children study the needs and life cycles of frogs, rearing tadpoles in the classroom. They have constructed a mini wetlands in the school grounds. The middle grades are involved in monitoring the wetlands through observation of the frogs and other animals that live there, and the upper grades conduct scientific analysis of the wetlands' health by monitoring water quality. The school draws on two key community resources to sustain this program: Waterwatch and Community Frog Census.

Waterwatch is one of the key things that will keep this project in focus in the long term. I see Waterwatch as the hub of the wheel, things revolve around them, because they've got their macro surveys, the Waterwatch lessons they do in schools... Waterwatch gives focussed ongoing training for the skills, the bigger picture of things, what we do with the data, photopoint monitoring. (Max Sargent, 2007a, interview)

Waterwatch Victoria is a community engagement program connecting local communities with river health and sustainable water management issues. Through Waterwatch, community groups are supported and encouraged to become actively involved in local waterway monitoring and on-ground action. A network of Waterwatch Coordinators supports local communities across Victoria in monitoring, planting, communicating and caring for their local creeks, wetlands, groundwater, rivers and estuaries. They are available to work in partnership with schools and I have observed them with the children at the wetlands. They teach the children to collect samples of water from the wetlands which are poured into white plastic trays where all the small creatures of the waterways become visible. The children learn to measure the health of the water by identifying which creatures are present.

The schools also worked with the Amphibian Research Centre (ARC) to develop the Frog Census program, based on the belief that frogs are the gateway to understanding the wetlands. The ARC was established as a centre dedicated to research and conservation of Australia's unique frogs. It is self funding and provides for its valuable work through sales and sponsorships. They supply pet frogs and tadpoles bred at the ARC, as well as enclosures, food, information, materials, and resources that are needed by those wanting to keep pet frogs. They stock frog books, tapes, posters, and other frog-related items. The Centre is also involved in efforts to breed and preserve a number of Australia's most endangered frogs, and is a base for the operations of the Victorian Frog Group. Frog Watch in Victoria is a highly successful community frog conservation program that originated as a joint project between the Amphibian Research Centre and Alcoa

World Alumina Australia. Its mission is to give Victorians the opportunity to help conserve frog life in their local area. The Primary School partnered with the Amphibian Research Centre to develop family science nights.

[An educator from the ARC] would come down for three days at a time and involve the communities and I think that's been one of the key factors in setting the scene, with each of the school communities, that wetlands are a good thing to preserve and frogs are the gateway to study the wetlands...He has his slide show and we do family science activities based on frogs and on those nights he trains the teachers, you have tea after school and he says here's the range of activities you'll be running tonight and he gives the background to each of those activities and the science behind those activities. (Sargent, 2007a)

The community education nights involved hundreds of families over the time of the grant: 'their response was so huge our multi purpose room was like a can of sardines, people outside the doors and windows'. The Primary School then established an ongoing Community Frog Census program funded by a partnership between Yallourn Energy (the owner of another power station in Latrobe Valley) and the Amphibian Research Centre. Once a month children and their parents meet at the wetlands to record frog calls: 'I think of one particular girl; in her family there's about nine kids and she's getting towards the end of all the kids, but Dad still finds time to come with her every month'. The night I visit the wetlands Kylie is there with her dad taking photographs and cavorting with twin boys who are there with their mother.

The other significant element of this program is a web-based exchange set up by primary school teachers in Latrobe Valley to interact with primary schools in Oregon, USA, who also have a program in relation to their local wetlands. The joint web-based program is called *Corroboree*:

The word corroboree is the aboriginal word for a gathering or meeting. The meaning is complex, including not just the idea of a physical bringing together of tribes, but a meeting of minds and philosophies, of gradual growth—a gathering of momentum as the tribes arrive.

This project will be implemented in the broadest spirit of corroboree. Initially teachers and learners from three Australian schools and three Oregon schools will be involved in the design and development of a secured web site where they will gather to exchange ideas and data on their school's science projects. (Oregon State University, n.d.)

This aspect of the wetlands program initially involved face to face exchange visits between Oregon in the USA and Morwell, Latrobe Valley, by participating teachers involved in the wetlands projects. The website is a learning place set up to facilitate ongoing exchange between teachers and learners from the USA and teachers and learners from Australia. The website is populated by both the teachers' and children's representations of the wetlands. They exchange digital photos, audio recordings of frog calls, graphs of water quality, drawings, stories and blogs.

SEEING DIFFERENCE DIFFERENTLY

I crouch down beside the water in the pose of the child, down beside this place just to see what I can see. I smell the rank smell of childhood water holes filled after rain. Peering in to the shallow pool I enter a still, tea coloured world of decaying leaves and grass, tiny creatures minutely disturbing the surface with their movements. But there are no tadpoles at the edges of this water. Why, I do not know. I walk a little further, feet squelching in the mud, looking for tell-tale signs of frogs' eggs with their tiny black dots of tadpoles coming into being, the sort of clear gelatinous globs on the smooth surface of the water. How did I learn that these were baby tadpoles?

My relationship with the Morwell River Wetlands program has been participatory and engaged. I have documented many activities and events over the time I have been in Gippsland. My interest is underpinned by place, and the elements of body, story, and contact zone as constituting an enabling pedagogy of place (Somerville, 2010). In analysing children's learning through the wetlands, it is the element of body that came into focus. I found Grosz' (1994) interpretation of Deleuzian body theory illuminating for this analysis.

I have discussed previously the power of the body in disrupting binary structures of language and thought in relation to body/place connections. In the chapter on body/place journal writing I referred to the space between body and writing as a site of transformation. In relation to the Morwell River Wetlands program, and the complex relationships between bodies, places, cyberspace, and pedagogies, Deleuze's ideas about the body had the most explanatory power. While Grosz summarises the extensive feminist criticisms of Deleuze and Guattari, she suggests that their work shares a feminist concern to overcome the binary dualisms pervasive in Western thought. She believes they offer 'an altogether different way of understanding the body in its connections with other bodies, both human and non-human, animate and inanimate, linking organs and biological processes to material objects and social practices' (Grosz, 1994, pp. 164–165).

There are two key and interrelated ideas that I want to take up in this analysis—"becomings" and "assemblages". Becomings as a concept focuses on the body-in-process, a dynamic conception of the body that includes 'the transformations and becomings it undergoes, and the machinic connections it forms with other bodies, what it can link with' (Grosz, 1994, p. 165). It is a body that is dynamically constituted as part of other bodies, as part of 'the flesh of the world' (Merleau-Ponty, 1962). I find this particularly useful when thinking of the human body's relationship with landscapes, weather, rocks and mountains, as well as with other non-human animate beings. These aspects have been disregarded in Western thought, especially in relation to place and place pedagogies. For Deleuze, the process of becoming, whereby the links between humans and animate and inanimate others are formed, is conceived as a 'production' of 'assemblages':

Subject and object are series of flows, energies, movements, strata, segments, organs, intensities—fragments capable of being linked together or severed in

potentially infinite ways other than those which congeal them into identities. Production consists of those processes which create linkages between fragments, fragments of bodies and fragments of objects. Assemblages or machines are heterogeneous, disparate, discontinuous alignments or linkages brought together in conjunctions... (Grosz, 1994, p. 167)

Human bodies, then, as corporeal entities, are continuous with other humans and non-human others but also with artefacts such as cameras and recorders, pens, paper, paints, computers, fabric, metal and machines. They are linked together through the production of assemblages. In other words, the representations we produce are conceived as part of our bodies. Assemblages are a way of understanding both process and product. Through the processes of assemblage, linkages are created between fragments, but an assemblage can also be seen as the product of this process, a pause in a continuous and iterative process of representation (Somerville, 2007). One of the outcomes of such thinking is to disrupt the usual binaries through which we understand our identities in places—such as the binaries of nature/culture, material/spiritual, and also more recently the cyber and the real.

It is interesting to note here that these ideas have many similarities to interconnected concepts of place, subjectivity, and representation in Australian Indigenous enactments of place, which are also based on a non-binary ontology and epistemology. For example, in ritual ceremony place, human bodies, song, dance, music, performance, and animal intersect momentarily in the creation of all that is (Somerville, 1999). This understanding of ‘ecological connectivity’ (Rose, 2004, p. 1) permeates an Indigenous ontology and epistemology. The translations, however, from such Indigenous understandings are both intellectually and politically complex (Somerville & Perkins, 2010). It is important to ask what Western theorists offer in terms of these ideas, as Grosz (1994) does in her project to interrogate Western philosophy from the perspective of the body. For these reasons, in this chapter I take up Deleuze’s playful thinking to ask: What place learning is made visible by thinking through bodies in this way?

Human bodies have typically been conceived in Western thought from an anthropocentric, Enlightenment perspective as discrete, rational, autonomous entities whose most important function is to house the soul or, more recently, consciousness. Bodily knowledge is regarded as base, to be erased, or subverted to the more important mind, or intellectual knowledge. Deleuze and Guattari’s concepts of bodies, becomings and assemblages, with their focus on process and productions, promise useful insights for a pedagogical practice of place that understands place as both material and metaphysical, constructed and natural, cyber and real.

My engagement in this program is perhaps best described as participatory action research in the sense that I have been involved actively as a participant in Community Frog Census, in school visits to the wetlands, in collaborations between teacher education students and children at the wetlands, and in lecturing to primary teacher education students with Waterwatch. I have had many informal conversations with Max Sargent, the lead teacher in this initiative, and have recorded a two hour semi structured interview about his work with the wetlands. I

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have visited the Morwell River Wetlands and the Science in Schools websites on many occasions and analysed the material there. In this chapter I use only the material that is available in the public domain on the website. The school is identified on this site so I have not sought to make the school anonymous but children's names have been changed. I am interested in analysing the relationship between the place, the integrated program, the website, and particularly the children's representations, in order to understand children's learning in this enabling pedagogy of place.

WHAT DID I SEE?

It's just on dusk, mid Autumn when we drive into the site. A half full moon and cool wind blow over the Wetlands, the freeway humming in front of us and the Hazelwood Power Station behind. Here in the wetlands the frog chorus begins. Frogs' skin is a membrane, permeable between inside and out, so frogs are a good measure of a place. Ben and Jim, ten year old twins, run down the road to join us, followed by their mum, and then Kylie, one of nine children, with her dad. Last month, because of the drought, there was no Community Frog Watch. Snakes hide in the giant open cracks, we were warned. Tonight, after recent rains, we make our way through frog calls, along softening cracked edges of the water, under the rising moon. Kids playfully use digital camera/recorders to take photos and record frog calls. We hear a whistling tree frog and a common froglet, and on the ground we read the tell-tale signs of fox, wallaby and kangaroo.

Entering into the Morwell River Wetlands on the web is a playful learning experience, in itself reminiscent of Deleuze and Guattari's 'practical geophilosophy' and 'rhizomes' (Gough, 2006). It is a visual cartographic experience of mapping knowledge in a non-linear way. The purpose of Deleuze and Guattari's practical geophilosophy is 'to describe the relations between particular spatial configurations and locations and the philosophical formations that arise therein' (Gough, 2006, p. 265). It is from this stance that I approach the website. Gough suggests that we should become nomadic in theorising science education and, quoting from Deleuze and Guattari, that '[r]hizomes affirm what is excluded from Western thought and reintroduce reality as dynamic, heterogeneous, and non-dichotomous' (Deleuze & Guattari, in Gough, 2006, p. 628). Deleuze and Guattari offer the rhizome, a root that spreads laterally underneath the ground, as an alternative to the tree. The tree, as in the tree of knowledge, symbolises the structure of patriarchal, authoritative knowledge.

When I type Morwell River Wetlands into Google, there are three immediately relevant sites and because I do not know the precise location of the student work on the web I visit all three. I navigate my way around these linked sites, in rhizomatic ways, until I decide to systematically investigate the material for this chapter. I do this by using a combination of looking at the web, downloading some material directly onto my laptop for later analysis, and writing with pencil and paper some

headings and sequences so I can understand layout and structure and the relationship between the different sites. In my head, and in my body, I have images and embodied experiences of the physical place itself through which I interpret its meanings. I move between these sensory images and memories of the physical place and the representations on the web.

In this sense the analysis is a map of learning; part of the analysis is recognising the map of linked information and sites. There is also a sense, however, that unlike navigating in geographical space, there are no recognisable landmarks and I can become irretrievably lost. I recognise this being lost, 'abandoning one's previous frameworks, getting lost, unsettling what was previously secure and clear' (Grosz, 1994, p. 166), as part of the process of rhizomatic thinking. I cannot, for example, re-locate some of the items that I have printed during my wandering on the web, nor can I re-find some places I have been. There is a conflict between the logical demands of analysis and rhizomatic thought. I respond to this by writing in layers. The first layer responds rhizomatically, making connections poetically rather than logically, to what I experience. Later layers organise the writing more systematically into the logical requirements of scientific analysis. Traces of earlier layers are maintained, however, in a process of palimpsest, so the final imaginary is a layered map where traces of earlier thinking remain visible.

There is a large amount of information about the Morwell River Wetlands. The overall storyline is the history of its construction by Hazelwood Power, now International Power, 'as a replacement for another wetland which will be dug up to access coal in the future' (Morwell Wetlands Project, 2007). Another site tells me that:

Before European settlement, the Morwell River provided a major floodplain tributary of the Latrobe River and the Gippsland Lakes. A major wetland extended from the confluence with the Latrobe River, as far upstream as Boolarra. Over time, the wetlands associated with the river have been eaten away by land development and river diversions. (Morwell River Wetlands, 2007)

This story of a bioregion gives time depth to my imaginings. I can also view a contemporary satellite map of the area, showing the location of the current Morwell River Wetlands in relation to the freeway, the railway line, and the Morwell River whose dark curvy line disappears abruptly, I presume into the pipe in the ground. I cannot see the open cut coal mine which I know is nearby and which appears as a massive red sore on Google Earth. The open cut is usually concealed from public view. I can see photos of the development of the wetlands over time until I recognise the place of my recent visit, deeply changed by the effects of severe drought. In this place described as the carbon capital of Australia I read the deep cracks in the ground as a local sign of the global effects of carbon emissions on the Earth's climate. I remember that my first Frog Census visit to the wetlands was cancelled due to the danger of snakes hiding in these deep cracks. I am aware of the minute and material effects of the global on the local. From these websites I gain a layered understanding of the place and its relationship to

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landscapes that have been dramatically altered by human habitation but continue to evolve in the complex relationship between human and ecological systems.

One site tells me hopefully that the ‘opportunity now exists to coordinate several projects along the Morwell River. The result could see wetlands re-established similar to those which existed prior to European habitation’ (Latrobe City, 2011). A pedagogy of hope has been noted elsewhere as important in relation to climate change, but while I admire the sentiment, I am looking for a more precise articulation of the nature of hope. Here the most hopeful thing for me is the link between the power generator and an educational agenda: ‘[a]s part of their responsibility to the community they have included scope for educational opportunities in their plans’ (Corroboree, 2011). It is this particular assemblage that has allowed the wetlands program to emerge and thus destabilise the binary of pathology that establishes the power company as evil.

I find the activities of the Primary School on Google when I type in the words ‘Science in Schools’, and more when I search just ‘Morwell River Wetlands’. It is on these sites that I can observe how these children from Latrobe Valley have engaged with a pedagogy of place. The site contains graphs of Waterwatch activities which measure the health of the water at different times, photos taken by children of the wetlands in different seasons and stages of its development, Frog Census data as a measure of their inhabitation of the wetlands, interviews the children have recorded with local knowledge holders, information about the Corroboree Club, and teachers’ resources. I navigate this populated and complex site along pathways of desire. I listen to the calls of many different frogs and match their calls with their photos and names. My greatest excitement, however, is when I find the photos and audio-recordings of the place as it was when I was there with the children that evening in the wetlands. I recognise the photos and sounds in my body memory: the dragonfly, yabby hole, kangaroo prints, kangaroo scats, brown tree frog, and common froglet. Yes, we were all there. Then there is Kylie’s brief voice recording:

Quarter to seven pm
29th of March 2007
Morwell River Wetlands
a half moon
getting bigger
it’s pretty dark,
about to record
some frogs.
[And the sound of frog calls.]

When I listen to the frog calls I am returned to that autumn night in the wetlands, a cool breeze, a half full moon, just on dusk as the frogs begin to sing. There are two things that strike me about the sound of these words. One is that the words are so precise, so of the moment, so spare and simple as to be poetic, a poem made of the moment in sound of voice and frog calls, a precise conjunction of time and place. The second is the significance of that moment being communicated globally on a

website dispersed through time and space. The moment itself is so significant in a pedagogy of place because it is about knowing place in all its intimate detail as a place of inhabitation, a place where we dwell with other creatures. It is only knowing place in its ever changing forms through thousands of such intimate moments that we can read a place, that we can know how a place is going, how well it is. It is only through knowing a place in those thousands of intimate moments that we can learn to love a place and have the knowledge to be able to take care of it. The assemblage of voice, image, and embodied memory connected and dispersed in time and space on the web is a powerful pedagogy of place.

The other thing that struck me is that if Kylie and I had not been there together in that physical place this would mean so much less to me. However much can be learned from the web, for me it is the fact that it is referential to a material place and to physical bodies interacting with that place that gives it meaning. To the extent that the qualities of that place can be expressed and communicated through digital recordings and images the knowledge can be shared. Even then it will be in reference to some other physical place of body memory through which it can be made meaningful as embodied learning.

I also find a marked Indigenous presence on the Primary School's site, unlike in most local information in Latrobe Valley. Doris Paton, a Gunnai/Kurnai Elder, speaks to the primary school children at the wetlands about the local Indigenous relationship to wetlands. On the website I can see her photo and hear her talk. I can also travel through hyperlinks to the story of 'The Port Albert Frog':

Once long ago there was a big frog, Tidda-lick. He was sick and got full of water. He could not get rid of this water and did not know what to do. One day he was walking where Port Albert is now, where he saw a sand eel dancing on his tail, on a mud flat by the sea. It made him laugh so much that he burst and all the water ran out. There was a great flood and all the blackfellows were drowned except two or three men and a woman, who got on a mud flat island.

While they were there, a pelican came by in his canoe. He took off the men, one at a time, but left the woman till last, he wanted her for himself. She was frightened and so she put a log in her possum rug, like a person asleep and swam to shore. When the pelican returned, he called her to come. No answer. Then he got very angry and went off to paint himself with pipeclay to go out and look for a fight with the blackfellows.

Before that time pelicans were all black. When he was partly painted with Marloo (clay) another pelican came by, and not liking the look of him, hit him with his beak and killed him. That is the reason that pelicans are partly black and partly white to this day.

There was a time when the first Kurnai, who was Borun the pelican, came down from the mountains of the north west, and reached the level country. He crossed the Latrobe River near Sale, and continued his journey to Port Albert. He was alone and carrying a bark canoe on his head.

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As he was walking he heard a constant tapping sound, but look as he may he could not find the source of it. At last he reached the deep water of the inlets and put his canoe down. Much to his surprise, he saw a woman sitting in it. She was Tuk. The musk duck. He was very pleased to see her and she became his wife and mother of all the Kurnai. (International Project with Oregon, 2011)

This Gunnai/Kurnai storyline traverses the wetlands and links me to its other places. It is replete with bodies and bodily events and the materiality of those places. A number of human and non-human characters, materials and artefacts come into being in this journey through country. Because of my familiarity with Indigenous place stories I can read something of the body/place codes embedded here, of human-becoming-animal re-enacted through ceremony in place. Even in such a simple account of a creation story it is possible to discern a storyline of connections between special story places across a vast geographic region where the physical shapes and contours of the landscape, the creatures that inhabit it, and the epic journeys of the ancestral beings are intertwined. These are the creatures of the wetlands, the pelican, the duck and the frog, and the interconnected story places are specific local wetland sites. The story tells of the interchangeability of pelican-human and duck-human, notably in this case beginning with pelican and duck, rather than human.

The story also creates an assemblage, linking material/geographical places, human and non-human bodies, and artefacts. The white clay used to paint bodies for ceremony, the possum skin coat, and the canoe are noteworthy in a story that is sparse in regard to the presence of cultural artefacts. The becomings and assemblages in this story illustrate my earlier point that there are close similarities between the Deleuzian theorising in this chapter and the underpinning Indigenous ontology and epistemology told through story. I have a memory image that connects this story to place as enacted in ceremony where song, dance, music, sound, place and bodies are simultaneously created and re-created in place (Somerville, 1999), and it is the echo of such a performance that I sense here.

By the end of the story I have travelled hundreds of kilometers on a journey through time and space from the Morwell River Wetlands to Sale in east Gippsland and down to Port Albert on the coast. Songlines are lines of place learning where children acquired knowledge by walking, camping, collecting and gathering food. They were initiated into higher levels of place learning through song and ceremony. While there I imagine the sand islands in the estuarine flats where the event in this story takes place. Because I have travelled through these physical places I can imagine them as now inscribed with these stories and events, a new transformed landscape. This story, in turn, is part of the Bataluk Cultural Trail, hyperlinked to six other cultural sites to which I can journey on the web to find out about different Gunnai/Kurnai story places. These include post-contact stories and place-histories such as the sites of massacres and missions. The web represents the songline, traversing the landscape and mapping the possibility of a postcolonial pedagogy of place for 'global contemporaneity' (Somerville, 2010). I connect to this storyline and make meaning of it from my intimate embodied knowledge of the Morwell River Wetlands.

Moving out of the website, and my journeying, I wonder if primary school children access this story and how they make sense of it, but this is another project. I remember that in the primary school classroom Max Sargent drew my attention to one child's book-making project. This child had recently discovered his Indigenous heritage and made a book based on an interview with his grandfather using Powerpoint software. I looked at his stories of language, loss, and discovery of places. Pedagogically it confirms the significance of the category of 'contact zone' in any place learning. The contact zone opens up alternative and invisible place stories and practices to generate a broader and more inclusive understanding of a place. These stories of the contact zone have been present for the children in their classroom and in the wetlands so maybe they will have some basis for moving out from the wetlands as home, to these more distant places and imaginations of otherness. The enormous complexity for me of living in Latrobe Valley is mirrored in the complexity of analysing the place learning of the Morwell River Wetlands project as an integrated curriculum at the Primary School. Through applying the framework of place, and asking the question what does place do, it is possible to gain some insight into the operation of an enabling pedagogy of place in a primary school. The particular focus on web-based representations and Deleuzian concepts of becomings and assemblages served to unsettle 'what was previously secure and clear', what might have been congealed into a fixed identity in my learning. It was however, a rhizomatic process of research emergence through which the digital DVD made visible and significant the performance of becoming-frog and called forth a Deleuzian response.

The storyline of the wetlands resonates with the remarkable tension between the technologies and operations of the power stations and open cut coal mines, and the Aboriginal songline of a system of rivers and wetlands. The Morwell River Wetlands, as place, sits in the space between these two storylines. Neither entirely natural, nor entirely artificial, it can in no way be regarded as a wilderness site for a romantic notion of nature. It is a truly postmodern place of the in-between, both natural and constructed, rural and industrial, cyber and real, global and local. In answer, then, to the question: how is place pedagogical?, it illuminates the ways in which a specific site can make available such complex learnings of place.

The question of the extent to which individual children learn these levels of complexity would require further research. However, having experienced these multiple practices as a pedagogy of place, it is unlikely that these children, growing up in the heart of Latrobe Valley, will have the same understandings of place as their parents and grandparents did. The Morwell River Wetlands requires complex place learning and offers the opportunity for a postmodern engagement with the place and its multiple and contested stories. These stories 'reintroduce reality as dynamic, heterogeneous, and non-dichotomous' and confirm the power of rhizomatic thought in that place learning.

The children's engagement with the wetlands is most evident in the activities on the website that are framed in terms of science: Waterwatch and Frog Census, for example. There are other forms of engagement, however, such as children's interviews with knowledge holders, talks from Aboriginal Elders, samples of

children's drawings, and stories. There are strong enough traces of the embodied experiences of place in the web-based representations of the March 2007 Community Frog Census to make some analytical comments about bodies as becomings and assemblages.

Kylie engages with the wetlands as a social experience with her father, other children and their parents and her one time teacher, and other occasional adults. She uses the digital camera/recorder with ease and simplicity as an extension of the expression of self, reproduced in photos, voice, and frog sounds on the web. These elements—her body, the place as material/geographical terrain, water, mud, plants, wind, the light of a half full moon, frog sounds and camera/recorder—are linked in that moment of becoming. To analyse her learning through Deleuzian notions of becoming and assemblage offers new iterative understandings of an enabling pedagogy of place.

I return now to the nature and meaning of the frog dance, which seems to me to be a production of a different order. When I watch the DVD I can feel in my body the extension of self-into-other required to perform frog. How does a frog move? What do its limbs do? How can your fingers be frog fingers, how does your body move to frog music? In this sense it is not mimicry that is required, but a becoming-other. And yet, this becoming is still underpinned by that intimate knowledge of place and its creatures that refers to that which is beyond the self. The frog calls, for example, enter the body in this performance in a way that is evident and undeniable. The performance itself transforms the space of the classroom. The classroom-becoming-wetlands in the production of frogs, and children's bodies, are transformed through a different body/place learning. This human-becoming-other, body/place learning is produced in relationship with the material/geographic place and its relationship to other places, both real and imaginary.

Finally I ask myself whether this complex theorising is completely divorced from the practices and meanings this activity has for the teachers and learners. I position myself as a learner/participant in this process, as a newcomer to both Latrobe Valley and the primary school classroom. I am an outsider and my task is to understand all of the activities in the Morwell River Wetlands program theoretically. In pondering this question in the writing of this chapter, I remembered an email exchange with Max Sargent, the teacher, about the April visit to the wetlands in which I was unable to participate. He told me that there were no frogs calling so the children engaged in other wetlands activities. I asked him why the frogs were not singing at the wetlands. He wrote:

Well I can't answer it for sure but if I try to think like a frog I would not want to be about tonight as the moonlight was strong making me more visible, the ground was very dry when I need to keep my skin moist. Perhaps the males said it was no point expending energy croaking for a mate, one who wouldn't want to travel any distance in these conditions. (Sargent, 2007b, email)

Max's response is as Deleuzian as my analysis of his understanding, in his story, of the pedagogical power of becoming-frog.

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