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## 7. FEATHERLINES

### *Becoming Human Differently with Earth Others*

Featherlines are the Aboriginal storylines of the great ancestral bird beings who traversed the Australian continent and continue to shape its living and non-living forms today. The research that underpins this chapter was carried out in D'harawal country of south western Sydney in eastern Australia. Here, at Yandelora the great Pelican ancestor begins its long journey through the country of many different language groups to join up with the Bronze Winged Pigeon storyline, traversing the continent all the way to southern Australia. This linked storyline of Pelican and Bronze Winged Pigeon is a featherline, a storyline of bird creation ancestors. This chapter draws on the idea of the featherline to focus on the ways that birds shaped contemporary children's experience of the Love Your Lagoons project. 300 children, their teachers and community educators participated in the project, walking to their local wetlands and incorporating their local wetlands into the school curriculum. In three of these schools birds were significant in shaping children's experience, creating entangled relations with children and calling forth affective responses from children, teachers and researchers. These stories of becoming bird are brought into conversation with each other to illuminate the ways that birds shaped the methodological and pedagogical actions and meanings that enable us to learn to become human differently. In following the storyline of birds throughout this project, the featherlines of D'harawal country are evoked at the heart of the matter of our worldly methodological entanglements and their pedagogical enactments.

### INTRODUCTION

#### *Featherlines*

The feather stories, as with all stories of place, are important part of the ancestry of Aboriginal peoples in Australia. Each different species of bird, or animal was the ancestral being of future families, and dictated the seasonal activities and foods, the alliances, including marriage, and the ceremonies. The story of the Way of Goolay'yari, the Pelican, begins in Botany Bay. The Cooks River was named after Goolay'yari because he left his footprint there when he crossed the river and the little island there used to be in the shape of the pelican's footprint. From there Goolay'yari featherline travels up the North Coast to Dhunghutti country, where it turns westwards

through Anaiwan lands, through Gamilaraay and Weilwan Country to Ngemba, then turns southwards through Ngiyampaa lands and into Barkindji country. From there the story of Marmbi, the Bronze Winged Pigeon travels from Barkindji country into Victoria and South Australia. There are other stories of which only fragments remain, for instance the Lyrebird story travels all the way to Ramingini country in the Northern Territory and the Black Swan Story travels to the south east of Western Australia. These stories were exchanged at ceremonial gatherings and retold when the listeners returned to their homeland. Over the millennia they were adopted and came to mark the travel paths and trade routes of the recipients of those stories.

Aboriginal children were taught from their earliest age (they did not have a starting birth date, but rather teaching started when the child itself was ready to learn), and one of the most successful methods of teaching in the early stages of growth was through story. Aboriginal stories covered every aspect of living, but most importantly all of the stories have included within them lessons of living sustainably with the land and its resources – the foods and medicines that were needed to sustain people’s lives. To be able to sustain themselves, they had to sustain the resources, had to sustain their lands. Even their ancestry became part of the sustainability focus of living on This Land. The ancestral beings, or to simplify the term into the common language of this day, ‘totems’, are an integral part of sustaining Aboriginal living habits. There were three levels of these totems – the Ancestral Being – or the equivalent of a national totem (something like the Kangaroo and Emu that are part of Australia’s coat of arms), the next level down was the mother’s bloodline, all the children born from that mother received the same bloodline totem, and the personal totem, an animal, object, or plant which had a personal relationship to the holder.

Although most people think that the totems only govern marriage, the totem also governs what Aboriginal people can and cannot eat. Those ‘totems’ belonging to a person cannot be eaten under any circumstances, nor can they be killed or harmed in any way by that person. Thus, when you consider that within any one group there are a number of animals, birds, fish or plants that cannot be eaten, there has to be a diversity of foods available. This ensures that not all of one type of food will be consumed in any one area, and it also ensures that the people themselves receive a diversity of food.

Children were taught the importance of not over using resources. Many of the stories told to the children ritually, every day, have within them lessons of how to survive during times of environmental stress, during drought, or cold times. There was a special time of day set aside just for the education of the young – usually early morning, after the normal camping tasks had been completed, the old women and the story teller would gather the children and tell them a story, after which it would be discussed before the children would then help with the selection of the camp site for the next day. In the hottest part of the day the children would again be gathered together, their mothers and the younger women, as well as the older women, and the story and its lessons and law would again be discussed. Later, perhaps, the story would be danced around the campfire at night. Thus, as part of their living and

learning, the children were taught, through story, the importance of sustaining the Land for their future well-being.

#### LOVE YOUR LAGOONS

The Love Your Lagoons project took place in Sydney's water catchment in Aunty Fran's D'harawal country of south western Sydney. It enacted a contemporary version of traditional Aboriginal learning. The project began with a Google satellite map of the catchment area and identified schools within walking distance of a 'wetland' – a creek, river, swamp or lagoon. The combined methodological and pedagogical approach was simple – the teachers from two classes in each school were invited to organize a walk to their local wetland and to incorporate their wetland into the school curriculum. The researchers participated in these walks and in the curriculum enactment in their allocated schools. The research was recorded and analysed in creative and emergent ways with attention on children's immersion in the wetlands and how this was translated into classroom pedagogies. In considering the data generated across this project from the perspective of 'earth others', birds overwhelmingly emerged as calling forth affective responses and creating entangled relations with children that exceeded and sometimes guided the pedagogical and methodological trajectories of the project. In following the storyline of birds throughout this project the featherline, one of the major songlines that traverses the continent from D'harawal country to southern Australia comes to the fore as a powerful but invisible force informing the project. The three following stories of bird entanglements can be imagined as sites on a contemporary creation storyline just as the sites of the ancestral beings are sites of creation where the performance of ceremony sings the place into wellbeing over and over again in the present moment.

#### *Bird Rescue: A Pedagogy of Affect*

Campbelltown Performing Arts High School had a well developed project approach already incorporated into the school curriculum prior to the Love Your Lagoons project. For the project they combined a Science and an English class and visited a highly managed urban wetlands in the centre of town, the Central Park Wetlands. They visited the wetlands on several occasions and the students designed projects of their own as individuals, pairs or small groups, based around a problem they wanted to solve. They continued this work across two terms with the students producing a range of different outcomes including a dance for a dying turtle, a book about 'Eric the Eel', new designs for the park, and a website. They performed their creations for the local shire council who were so convinced by their work that they put much of it into practice and continued with a further project in another site. The most striking story to emerge from this school was the story of the rescue of an injured bird that students found in the Central Park Wetlands.

The following scanned lines are created from a transcribed audio recording of the young people's account of an injured bird presenting itself to them and its subsequent rescue. The account was not offered as a single voiced continuous narrative but as a collective story told by several interjecting voices. Although articulated after the event the words stammer with an affective intensity that holds something of the pre-conscious, pre-individuation quality of the experience. The best way to represent the encounter as words on a page seemed to be in the scanned lines that I call, for want of a better term, a bird-poem. In the following I offer a reading, stanza by stanza, of this encounter that changed the whole meaning of the wetlands experience for these students, their teacher and the researchers.

*A Bird-Poem*

Standing up on the rock  
looking around  
others going to walk  
down closer to the river  
I go 'Look out for that duck there'  
and then we seen him  
he was just sitting  
stuck in the bush  
trying to get up and  
when he lifted his left leg  
every time he tried  
something pulled him back down  
looked like he was tangled  
in the weeds  
was all muddy  
then he tried to move again  
rolled down the hill  
and stayed there.

The first stanza of the poem is about the positioning of bodies in space. In the beginning the boys position themselves in the typical pose of the distant (explorer) standing on rocks surveying the world around them, individual humans as separate from the landscape. Their bodily positioning in relation to the world changes with the words 'look out for the duck there'. They become entangled in the body of the injured water bird as it tries to move its leg but is tangled in weeds. Their observations move into bird-world of mud, weeds, slope of land, aborted movement of bird and its unwanted still-ness as it 'rolled down the hill/ and stayed there'.

It was upsetting to see  
that he was in pain  
he was just struggling

we felt bad  
 when we didn't have Miss  
 didn't know what to do  
 whether to pick him up  
 or leave him  
 just walk away  
 it was upsetting  
 went and got Miss  
 and we called Wires  
 they said that it was okay  
 for us to pick him up  
 put him somewhere  
 where he was comfortable.

The second stanza of the poem is about the disorienting dilemma the bird poses for the boys and the response that the injured bird calls forth. They are affectively moved in this bodily encounter, in their entanglement with the entangled bird they have become other to themselves. When the teacher arrives and uses her mobile phone to call the Wildlife rescue service they are relieved because they know what to do for the bird.

We picked him up  
 with the jacket  
 we found in the bush  
 we found that jumper  
 put him in a box  
 took him back to school  
 realised it was us  
 that saved him.

The boys are further folded into water-bird-world as an abandoned jacket becomes a nest and they place the bird in a box to take it back to school. The affective encounter changes from 'upset' to a sense of calm as they realise that they have saved the bird. Their focus is not on their heroic actions but on reading what the bird needs by its movements, sounds and bodily expressions. In realising it was us that saved the bird they acknowledge themselves as coming into being in relation to bird,

Miss took it to the vet  
 got a call saying  
 it's back out there now  
 and it's alright  
 he was just hungry  
 I think he was stressed out  
 because he was stuck  
 hadn't eaten in a while

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it was a baby  
just getting his colour  
on his beak, red  
a swamp hen  
and when he made that chirp noise  
it was only like high pitched  
he seemed not to be scared for long,  
he sort of settled  
was in distress and then  
just relaxed  
warmed up to us I guess.

In the finale to the story of the encounter the place of the school, the vet, the teacher's actions and the outcome for the bird come together, it has an integrative function. The quality of affect is there, the bird as swamp hen is recognised in its named identity, its age from its beak colour and its high pitched call, is both separate and entangled with them. They remember the ease of the bird's distress as boys and birds together feel a mutual affective relief in the temporary agential cut of the relation produced by their mutual actions. The bird settles, relaxes and warms to them and their mutual distress subsides with the focus of the story remaining on the bird.

In the agential cut of this intra-action, bird and human come into being differently (Barad, 2003, 2007). The bird becomes a particular type of water bird, a swamp hen, with the characteristic red coloured beak and high pitched baby bird call of a juvenile. The human comes into being through its relation to the bird as the bird settles, relaxes and warms to them.

It changed the day  
completely  
like at first we thought  
we're just going there  
to do paperwork  
we went to that back lake thing  
in a place we shouldn't have been  
when we found him.  
so much more interesting  
once Miss explained Wires  
what they did  
other hotlines  
for animals and stuff.

This final stanza comments on the pedagogy of this encounter. It locates the world-changing nature of this encounter in a 'wild place', a place where 'we shouldn't have been'. The wild place is counter posed to a pedagogy of paperwork, to the organised school curriculum of written knowledge. It is this this place of excess of the planned

curriculum and pedagogy that enables the encounter to happen. The disorienting dilemma shifts the sense of what is possible for the boys to be and to know, it opens up a different onto-epistemology when they lose their sense of themselves as independent beings and are folded into the encounter with the bird. They learn words and actions for this encounter, WIRES hotlines for injured animals but neither the words nor the actions can match the affective intensity of the preconscious, pre-individuation of the initial encounter of bodies and materiality.

*Squawker Hip Hop*

Squawker's a bird  
 found by the sanctuary  
 stuck in the bush  
 when he did penitentiary  
 looking for a feed  
 when he started to roll  
 down and down the hill he went  
 till he got to the bottom  
 which is like cement  
 took him out  
 got some help  
 took him away  
 now he's back and he's healthy  
 let me take a selfie let me take a selfie  
 Selfie selfie let me take a selfie.

In a final performance one of the boys produced a hip hop dance of the bird rescue, a perfect rendition in body movement and sound where language was bent to the rhythm of affective relation between bird and boys. Drawing on the Deleuzian figure of the child Maggie MacLure (2015) proposes that materialist research methodologies need to embrace the a-signifying, affective elements that are at play in becoming-child. Not yet fully striated by the rules of grammar that order and subjugate the world, Deleuze and Guattari suggest that children challenge 'the hegemony of the signifier' by remaining open to multiple semiotic connections that do not obey the laws of conventional language and representation. Moreover such materially-engaged, a-signifying semiotics do not disappear as the child grows up and becomes more adept and embroiled in the 'order-words' of conventional language. Rather, they persist as affective 'blocks of becoming' that Deleuze and Guattari call 'becoming-child', and which they assert can befall us and carry us off in unforeseen trajectories at any age (Deleuze & Guattari, 1987, p. 294).

It is in this movement from pre-individual immersion to forms of representation and action that affective states can become available for pedagogical work. The emergent methodology of the research enabled children to experience an affective

relation with the world around them and evolved into a pedagogy of affect for these students. Drawing on the Deleuzian concept of affect (Deleuze, 1991), Clough offers an account of the methodology of new empiricism as allowing for ‘a rethinking of bodies, matter and life through new encounters with visceral perception and pre-conscious affect’ (Clough, 2009, p. 43). As the children recount in their story of the injured bird, they registered an affective connection with the bird that changed everything that happened for them in that event. Affect is not only pre-conscious; it is pre-individual; in their affective response to the bird they lost their sense of themselves as separate autonomous individuals looking down on the world around them from the rocks. They became one with the world of bird. In this move they entered a space of indeterminacy where unstable pre-individual forces are neither in a linear nor deterministic relationship to the individuated molar body, which these pre-individual forces nonetheless constitute (Clough, 2009, p. 48). They do not know what to do, they call their teacher to their aid in the wild place, the place where they were not supposed to be, the excess of regulated curriculum and pedagogy. The teacher calls the wildlife rescue service, words are attached to the experience, and actions are made possible through which they recognize themselves as human differently. Their human is entangled with bird, a human becoming bird assemblage.

DUCK WORLD: COMMUNICATIVE PRACTICE THROUGH TOUCH,  
MOVEMENT AND SPIRIT

*Duck World*

Ducks in little group cruise on a still water opposite little group of children sitting on bank. Two ducks paddle towards children, children talk to ducks. ‘Are they girl ducks or boy ducks?’ one says. ‘The bigger one is a boy and the smaller one a girl’ they decide. Ducks upend bodies into water revealing brilliant aqua blue underwing feathers. ‘They must be boy ducks’ children say, ‘they’re eating tadpoles’. A couple of dusky swamp hens join the duck group and a frog calls from the water lilies. Boy lifts binoculars to eyes to look for frog but says instead ‘look, it’s wool’, as bunches of soft fluff tumble out from downy brown reed heads. Magpie sitting in nearby casuarina drops onto small boy’s head, boy runs off, magpie joins group of kids sitting on bank, hangs out with them, ‘it’s tame’ they say as it joins their watery world communion. (Fieldnotes, August 2014)

We walked with two classes of children through the busy streets of Camden to the Camden town wetlands, a small tributary on the edge of town that feeds into the Nepean River. The children were lined up in assembly after lunch, two who had forgotten their hats were forbidden from coming and the rest were marched through the streets under strict supervision. At the beginning of the walkway that follows the line of the wetland the children were assembled again and given task instructions, departing with their clipboards and worksheets to complete their observations. For



this group of children by the duck pond, clipboards and worksheets were set aside for this time of exchange with the bird creatures in their watery world.

### *Drawings and Photographs*

The children visited the wetlands on several occasions, one class following the adaptation of water birds, the other recording the ducks in photographs and pencil drawings. When they were given cameras for their walk in the wetlands, the teacher thought they might want to take photos of one another but that wasn't what they were interested in, they took photos of the ducks. They also did drawings at the wetlands, learning to sit very still and quiet so they did not frighten the water birds away: 'it's the sitting still and the being quiet so you could actually see the animal move naturally and peacefully and then you can start to draw or make notes or whatever'.

They did a lot of tiny drawings on pieces of paper. They may only have been a few centimetres square. We had two turns at drawing, we looked at shape and we really talked about shapes of heads, particularly. I talked a lot about shape to start with, and they drew – they talked to each other and we looked at the things that we liked about our drawings and things that we thought we'd done well, and then that's when they really started to – they started to focus in on textures of feathers, shadows, and ripples and often – some of them had a second go because they felt they wanted to have another go and wanted to try again. (Teacher interview)

Their drawings translated their engagement with the ducks in their watery world to mark making in the medium of pencil and paper. Even though all of the children were given the same activity of drawing a picture of a duck the task evoked different responses according to their different sensory engagements with ducks and wetlands. In reviewing the children's drawings the teachers grouped them according to the three things the children talked about as they drew: the texture of the feathers, the ripples in the water, and the shadow of the bird on the water.

### *Feather*

For the children who focussed mostly on the feathers in their drawings, it was the visual and tactile qualities of the feathers that captured their imagination and energised their mark making.

So what I think he's trying to do here is ... he really is trying to look at some idea of tone and colour, so he's trying to get something that indicates the colour of the feathering here in using pencil. He's trying to look at the relative size of feathers from around the neck and these larger feathers towards the tail. There is some attempt at showing how the water moves, and the duck's shadow there ... He's got the shape in here to show the wing that's folded in underneath

the bird as it's swimming. So, I think probably what he's trying to do there is showing a lot of observation. (Teacher discussion)

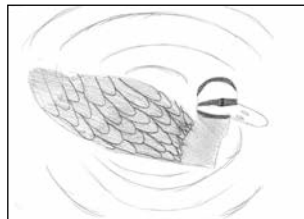


Understanding and representing the element of feathers draws attention to touch and the significance of touch in communication between duck and child. The texture of the feathers have a sensory quality in the sleek smoothness of feathers along the main body, the fold of feathers on the wing, the soft downy feathers underneath, and the patterns of dark and light that reveal the different textures and colours of the feathers. Touch brings the hand-eye co-ordinating of the mark-making child into direct relation with the body of the bird.

### *Ripple*

A number of the drawings seemed to emphasise the relation between duck and water. The drawings in this grouping used shading, concentric circles, smudging and rippling to indicate the movement of water in relation to the duck.

And the other thing that they wanted to show, and they wanted to do, was show the ripple, and they weren't sure how to do that, they talked about that and some of them said, do you think this looks like the water rippling, or some of them said, the waves in the water. Those ones. And what have we got here, just ones with water backgrounds. You know in a way because this person is trying to make some attempt at showing how the water ripples as the duck moves. (Teacher discussion)



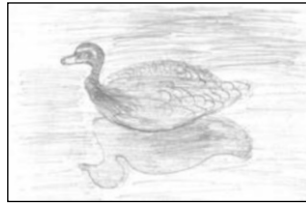
Representing the pattern of ripples on the surface of the water draws attention to movement as communicative practice. The ducks continually move across the

surface of the water, never still but always moving around, ducking up and down to feed under the water's surface, joining together with other ducks in pairs and small groups. As they move their bodies, already shaped for their watery world, make ripples and waves on the surface of the water. In the stillness of the pencil drawings, the ripples are a reminder of this continual movement, of the relation of body of duck to body of water, and of the patterns of feather, shape and ripple that flow across the surface.

### *Shadow*

Many of the children photographed the shadow of the duck that appeared as its reflection on the surface of the water and then translated this into their drawings. For some, the shadow presence was the main feature of the drawing.

I noticed someone before was talking about shadow – I hadn't even mentioned that, but they'd looked at how the – because it was quite a dull day there was shadow underneath the bird – when they were looking at the photos, as they were drawing, that's what they were looking at, and well, Sophie talked to me about how she felt that – she said, this doesn't even look anything like right, I can't even – she showed it to me and she said, this – that's what she said, the shadow isn't right. (Teacher discussion)



Many children who took part in the Love Your Lagoons project expressed their fascination with reflections and shadows. For Aboriginal people the shadow that appears in this way, especially when it is visible in photographs, is the spirit presence of the living creature. Spirit presences play an important part in Aboriginal daily life; they are taken for granted aspect of the spiritual world that is simultaneously both material and spiritual, not separated as in the binary constructions of western knowledge systems. When the children observe and translate the shadow presences of the ducks they are participating in this same sense of the shadow presence, the ineffable accompaniment to the material forms of everyday life.

### PEDAGOGIES OF CARE-FULL OBSERVATION

In many ways this school's participation in the 'Love Your Lagoons' project was a struggle that was representative of the challenges of incorporating wetlands into

the school curriculum across all of the schools. The teachers often talked about the pressure of standardised curriculum and outcomes that made this work difficult for them but also recognised the significance of the act of taking the children to the wetlands.

I think we don't realise how important it is to actually get away from the classroom. You know, you think, well I've got the interactive whiteboard, I've got all these computers, I've got all these things, but it's not quite the same as being there and touching it. And a lot of their life is lived by computers and things, and you need to get out there and experience, and that's why they, when you do, they really enjoy themselves. (Teacher discussion)

In the tension between meeting standardised curriculum outcomes and the visits to the wetlands, it is 'touch' that this teacher focussed on. It is touch that most represents the entangled relation between children and ducks that led to their beautiful pencil drawings that were a surprise creation in the Love Your Lagoons project. It was touch, movement and shadow world as communicative practice that translated the pedagogies of care-full observation into creations of beauty and insight. Recent theoretical development and empirical research in multimodal communication has paid close attention to the ways that touch and movement can be understood as communicative practice between humans. Bezemer and Kress (2014) have explored the ways in which touch is used as a resource for making meaning and how touch might develop into a 'mode' that can serve a 'full' range of semiotic functions within a community. While they think that the question of whether touch can be fully recognized as a new mode in the sense of 'touch literacy', they argue that such thinking is necessary 'because there are now many common and essential forms of practice where no lexis spoken or written is available, nor visual means for transduction' (Bezemer & Kress, 2014). Translating this to an understanding beyond human-to-human communication suggests that the sense of touch can be seen as a form of interspecies communication activated in the children's drawings of the ducks, their sensory response to the texture of feathers. These drawings are predicated on their direct communion with the ducks as it is translated into drawing through another layer of touch, the touch of pencil on paper through hand-eye co-ordination.

Movement can also be understood as communicative practice that can be expanded to include interspecies communication. Abigail Hackett has mapped young children's movement trajectories in repeated visits to a museum, establishing that their movements constitute 'world forming communicative practice'. Through their movements 'place is constructed not only both physically and experientially, but also conceptually – physicality, experience and concept are all related to and expressed in the multimodal communicative practices of the young children' (Hackett, 2014, p. 22). These place-making practices 'impact on both the "world-in-formation" ... and on the child's embodied growing understanding of the nature of both the world and communicative practices' (Hackett, 2014, p. 24). In considering the trajectory

of methodology and pedagogy in this instance it is possible to understand movement as communicative practice in the entangled relation between children and ducks, translated into mark making through the movement of hand-eye-pencil to paper.

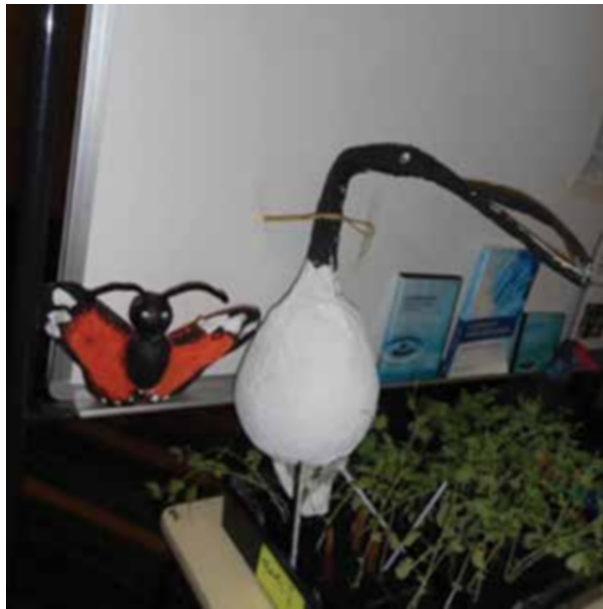
Finally communion with the spirit world, common in Aboriginal communicative practice (see Somerville & Perkins, 2010) can be understood as part of the repertoire that the children have developed in relation to the duck world. They sought to understand the ineffability of the shadow, the reflection that accompanied the material earthly body of the ducks they photographed and drew. By linking the bird stories that emerged in *Love Your Lagoons* to the featherlines of Aboriginal ancestral creation stories we can expand our understanding of the ways that children seek the ineffable in their search for meaning. Imaginatively expanding the possibilities of the methodological and pedagogical encounters with birds opens us to a more expansive relation with earth others in which the life force of the other is enabled to enter into forms of communicative practice through which humans can learn to be human differently.

#### CREATING IBIS: PEDAGOGY OF ORGANISED CHAOS

Cacophony of noise inside science classroom of children busy making papier mache creatures. Where's sticky tape, glue, papier mache paint ... One child draws a map of Lake Annan, 'it looks like a shark's fin'. 'This is a beautiful map, do you like drawing maps?' 'I like drawing, I totally do cos I don't really do it often'. 'So what are you drawing this one for now?' 'Um cos I had to wait for glue for my spider which looks more like a termite'. 'I've gotta get some wire make the legs, gotta do the eyes and everything, I need the fur on. I've recoated it, I coated it yesterday with the brown and there's still bits of newspaper you can see so I might have to do another coat, I gotta wire coat hanger make the legs, have to wrap sticky tape around that, paint the legs'. Back to map. 'I'm pretty sure there's two bridges around here, somewhere, footbridges. I'm pretty sure the roadway ends in a roundabout around here. It's got a little island in the middle'. 'Is that where the ibis goes?' 'Yeah and they made a wreck of it. Actually the scientists are fixing that by putting something in the ibis's eggs'. (Fieldnotes, 2014)

The children in this science classroom are transposing their experience of the nearby Lake Annan into three dimensional models of the living creatures they have observed at the Lake. The teacher explains that she decided to create the creatures they find down at the Lake because her class is 'very hands-on' and it would work better than just talking about the animals. The day when we visit the class is halfway through the process where they have developed a design template using a photo of the actual animal, then drawing the animal and producing a design of how they are going to create it as a three dimensional model. The teacher happily describes the lesson as 'organised chaos' with children at all stages of their design and making,

working individually, in pairs and small groups chatting loudly and moving around to access materials as they work. Their models are not allowed to be more than thirty centimetres high but the Ibis is an exception to the rule. The teacher draws our attention to the ibis in particular: ‘So this is one of our really, really, good examples of our Ibis. He’s going to try and put the legs on hopefully today. He did that at home in the school holidays. I was very, very, impressed with him’.



Lake Annan, like many of the urban wetlands in the ‘Love Your Lagoons’ project is a contested site. Surrounded by housing estates the presence of waste disposal in landfill has increased the numbers of Australian white ibis to proportions that are out of balance with the delicate eco-system of the Lake. The ibis breed on the small island in the middle of the Lake, increasing the nutrient load of the water, and destroying the vegetation on the island. In 2009 1,109 ibis were counted on the island. The number declined to a peak of 700 between 2010 and 2012 with the control of the local waste facility. As local landfill sites are closing the ibis numbers are dropping further, along with the introduction of a breeding control program that involves oiling of ibis eggs and the destruction of abandoned nests on the island.

The whole activity is energised by the children’s familiarity with the ibis in their area: ‘I’ve spoken to the kids about it because the kids always have said the Ibises just take over down there and there are a few kids that I’ve had in other grades that live across from the lake so they’ve said they just went everywhere at one stage’. The teacher explains that ‘Ibises are like seagulls, they’re quite adapted to urban

environments so it's one way of keeping the population down is to deal with the eggs more than birds and just try and keep much of a population control as they can down there'.

For the children, Lake Annan, and its ibis, are just part of everyday life. One girl tells us how she visits the Lake with her grandmother and describes all of the different animals that they see there, birds and fish, ibis, ducks, black swans. When they visit the Lake with their class the children learn that Lake Annan is populated by all of these creatures and more. Back in the classroom they design and create models of all of them, birds, spiders, insects and fish and at the end of the project they transport their models to the regional sustainability expo to teach other children about the living creatures in their Lake. They teach them about the delicate balance of eco-systems and how sometimes the entangled relations with human populations means that a system becomes out of balance and corrective actions have to be taken.

By creating three dimensional models of the creatures they see at the Lake with their hands, the children re-create something of this entanglement.

They love it, every day we're making our animals and I'm oh yeah we're making our animals. So they – yeah they really, really, enjoy it and they like that hands on thing and I think it kind of resonates a bit more that these are the animals but now you get to make it. So I think it kind of fits in a little bit better.

In using the words 'it kind of fits in a little bit better' the teacher acknowledges the embodied nature of the learning, the 'fit' between the activities that the children undertake with their bodies, hands and eyes, in the making. The world around them of bugs, ibises, lake, houses, school and classroom all interacting together. They learn about the bodies of creatures other than humans and the ways that these bodies are adapted to living within complex ecosystems of which humans are just a part. They become attached to their model creatures, learning that nothing is separate, all is intertwined when 'they get to have that touchy feely hands on type of aspect' that they love.

The pedagogy of organised chaos enables the teacher to draw from 'the chaos of the world' in a classroom pedagogy that enacts the entangled relations between humans and other living creatures. Feminist philosopher Liz Grosz draws on Darwin, Irigaray and Deleuze to explore the relations between chaos, territory and art. Chaos is described as the condition of the universe:

'In the beginning' is chaos, the whirling, unpredictable movement of forces, vibratory oscillations that constitute the universe. Chaos here may be understood not as absolute disorder but rather as a plethora of orders, forms, wills – forces that cannot be distinguished or differentiated from each other, both matter and its conditions for being otherwise, both the actual and the virtual indistinguishably. (Grosz, 2008, p. 5)

The disciplines of philosophy, art and science, draw on and over this chaotic indeterminacy of the real with its impulses to ceaseless variation, drawing strength,

force, material from it, ‘for a provisional and open-ended cohesion, temporary modes of ordering, filtering’ (Grosz, 2008, p. 8). It is the frame that enables a part of chaos, the real, to enter the realm of representation. The curriculum of this science classroom can be understood as the frame that allows teacher and students to draw from the chaos of the world. Within this context pedagogy is an ‘inherently relational, emergent, and non-linear process that is unpredictable and therefore unknowable in advance’ (Sellar, 2009, p. 351). A pedagogy that connects to the lives of children in their more-than-human worlds is ‘responsible’ in that it enacts a form of ethical responsibility’ that can be described as a pedagogy of responsible uncertainty, borrowing as it does from the chaos of the world (Somerville & Green, 2011). A pedagogy of organised chaos in this classroom combines the disciplines of Art and Science.

Art, according to Grosz, is the excess of natural selection, produced from the libidinous energies of reproduction. It is the means by which sense is made out of chaos to produce ‘sensations, affects, orderings, intensities – blocs of bodily becoming that always co-evolve with blocs of the becoming of matter or events’ (Grosz, 2009, p. 9). In creating their design templates and making their models the children are caught up in the production of sensations, affects, orderings and intensities through which they become other with ibis, swan, mosquito and spider. In learning about the recording and controlling the ibis population students engage in the discipline of Science which ‘places boundaries, limits, experimental conditions on those forces so that their vibratory effects become predictable’ (Grosz, 2009, p. 62). Such actions to control the ibis population in relation to their human entanglements is required to re-dress the imbalance produced within urban conglomerations of human and ibis. In this science classroom the ‘pedagogy of organised chaos’ enables teacher and student to imagine new becomings with their animal models and scientific knowledge that connects to their everyday lives and local places.

#### SITES ON A FEATHERLINE

In imagining these three places and their different performances as sites on a featherline we are recognising the contemporary translation of the creation stories of the great ancestral birds. Storylines follow pathways of travel for big and small ceremonial gatherings through which the country is sung into (well)being. In Love Your Lagoons the methodology of walking created similar pathways, walked on many occasions now and into the future, where the power of the more than human world to enact human entanglements could be recognised and learned. The birds created special relations with the children who responded with affective intensity, a passionate love of the activity that changed the way they experienced being human.

In the bird rescue story we recognised the disorienting dilemma in which pre-individual and pre-conscious affective states came to the fore to change being human from a separate spectator of the world around them to being unravelled, fragmented



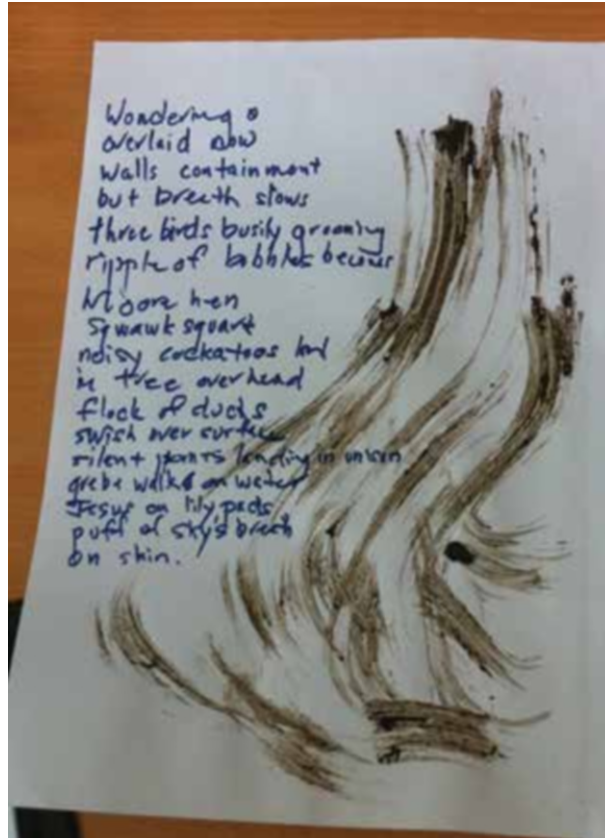
and come apart in the face of the injured bird. This happened only when they entered territory outside of the regulated curriculum, a place where they should not have been. In entering this space they recognised a new form of human in relation to bird as it settled and relaxed in their care. They storied and danced their experience of a pedagogy of affect.

Children in the Camden Town Wetlands learned care-full observation that enabled them to enter the world of ducks. Abandoning their task oriented worksheets they communicated with the collective of ducks as a collective of humans sitting beside the still waters of this very urban wetland. Despite the struggle of incorporating the wetlands into the very standardised primary school curriculum, the powerful life forces of the ducks enlivened the children's embodied relation expressed through touch. The touch of feather, the movement of water and the shadow of spirit presences translated surprisingly and beautifully into a collective of twenty nine duck drawings.

In the pedagogy of organised chaos of the model making science classroom the children created the living creatures that they encountered in the nearby Lake Annan. Through their love of the hands on activity of model making they reproduced the bodies of the creatures, including the ibis, the quintessential bird-human entanglement of contemporary urban living. The disciplines of Art and Science come together in this science classroom to create the frame of the modelling activity which allows the children to borrow from the chaos of the world. In this borrowing they create a temporary agential cut, a moment when child and ibis come into being in a temporary representation of their entangled lives. For the child who creates the ibis, it is neither pest nor friend, it just is, and the child becomes human differently in this moment of creation.

#### *Postscript*

*Researcher: Exercise in mud.* Just sat for a long while in mud until breath and heartbeat slowing down to waterway pace of ants on rock, crawly critters in mud, heaps of waterbirds talking playing eating swimming and others coming and going. Decided to write bodyplacebog on my iphone notes. It doesn't have room for more than a few words. Started walking back then realized that removed from the mud desperate to bring some with me for our last presentation and display exercise. Walked back to mud, grabbed strip of paperbark as paintbrush, then few steps later saw perfect paintbrush on the ground, stick with beautifully frayed end. Back in the room still connected to the mud at edge of lagoon, paperbark and painting stick in hand as if mud with me. Grabbed glass rushed back to edge of lagoon, scooped up some mud and brought it back mixed with a little water, stirred with painting stick. Late back so all time for was to make some swirly marks on white sheet with muddy stick, lovely black mud marks, exquisite pleasure. Then I scribed my words from iphone to paper in black text.



#### REFERENCES

- Barad, K. (2003). Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs: Journal of Women in Culture and Society*, 28(3), 801–831.
- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Durham, NC: Duke University Press.
- Bezemer, J., & Kress, G. (2014). Touch: A resource for making meaning. *Australian Journal of Language and Literacy*, 37(2), 77–85.
- Clough, P. T. (2009). The new empiricism: Affect and sociological method. *European Journal of Social Theory*, 12(1), 43–61.
- Deleuze, G. (1991). *Empiricism and subjectivity* (C. Boudas, Trans.). New York, NY: Columbia University Press.
- Deleuze, G., & Guattari, F. (1987). *A thousand plateaus* (B. Massumi, Trans.). London: Continuum.
- Grosz, E. (2008). *Chaos, territory, art: Deleuze and the framing of the Earth*. New York, NY: Columbia University Press.
- Hackett, A. (2014). Zigging and zooming all over the place: Young children's meaning making and movement in the museum. *Journal of Early Childhood Literacy*, 14(1), 5–27.

Sellar, S. (2009). The responsible uncertainty of pedagogy. *Discourse: Studies in the Cultural Politics of Education*, 30(3), 347–360.

Somerville, M., & Green, M. (2011). A pedagogy of ‘Organized Chaos’: Ecological learning in primary schools. *Children, Youth and Environments*, 21(1), 14–34.

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