

Living with Crocodiles: Engagement with a Powerful Reptilian Being

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***Abstract:** As an animal, crocodiles loom large in the human imagination. Crocodiles also grow to very large sizes in the real world, large enough to consume humans. Eco-philosopher Val Plumwood came to the realisation, while being churned under water within a crocodile's jaws, that for the crocodile she was food, merely a piece of meat. The intention of this paper is to instigate thought on how views can differ from the portrayal of the crocodile as a primitive monster. In northeast Arnhem Land, the saltwater crocodile is commonly encountered as a moving shape out on the water, or through fresh signs of large lumbering tracks upon a beach. For individual Yolngu, whose clan totem includes the saltwater crocodile, or Bärü, this being is an integral part of social existence. Bärü features in ceremony, within song, dance and in bark paintings. I examine how Yolngu negotiate with the saltwater crocodile as a very real threat to human life; but also how Yolngu have a deep respect for the crocodile through a mutual essence and connection to country.*

***Keywords:** crocodiles, Yolngu, Arnhem Land, human-animal, apex predator, ecological philosophy, Plumwood*

Introduction

When eco-philosopher Val Plumwood was still alive, she told me a story about how she was attacked by a crocodile over two decades earlier. I was somewhat surprised by her story at the time but did not dwell on the enormity of such an encounter, as she related the event in such a pragmatic way. After reading her article ‘Being Prey’, I realised the full significance of what she had related to me and how it changed her philosophy toward life (Plumwood).

On a rainy day, Plumwood ventured out in search of some Aboriginal rock art in Kakadu National Park, in the Northern Territory of Australia. She was paddling in a canoe by herself in an area where there were numerous crocodiles. After becoming somewhat lost, she thought there was a log on the surface ahead but the log strangely converged with the canoe. The log developed eyes and began banging into the canoe. In order to avoid being capsized, she tried to leap to a stringy bark tree but the crocodile burst from the water. To quote Plumwood, ‘I had a blurred incredulous vision of great toothed jaws bursting from the water, as I was seized between the legs in a red hot pincer grip and whirled into the suffocating wet darkness below.’ In her mind, in a desperate attempt to protect herself she was thinking, ‘This is not really happening, this is a nightmare, from which I will soon awake,’ but ‘this desperate delusion split apart as I hit the water ... I glimpsed the world for the first time ‘from the outside’, as no longer *my* world, as raw necessity, an unrecognizable bleak order which would go on without me, indifferent to my will and struggle, to my life as to my death.’ (30) In horror, she realised that the crocodile was thinking of her as food, as just a piece of meat when as a human being she felt that she was so *much more than food*.

Through sheer tenacity Plumwood escaped. Back in the hospital journalists were eager for interviews. She avoided publicity, as she did not want the story to be usurped by others for dramatic effect. The authorities wanted to shoot this ‘man-eating crocodile’ but she refused, as she felt she had imposed on the crocodile’s realm, not the other way around. Plumwood writes that hers was a story that invoked the monster myth – a ‘culturally revealing feature of much of the media coverage was the masculine appropriation of the experience’ (34). The popular movie *Crocodile Dundee* was made not long after Val’s encounter with the crocodile and Val points out how different this narrative was from her own experience, with a male hero saving a helpless

woman from a huge, masculine monster. Plumwood's experience with an individual crocodile changed much of her future philosophical writing. With the benefit of time and hindsight she realised, in her disbelief about being eaten by a crocodile during the attack, that she had fallen into the Cartesian dualistic mindset that she had spent such a lot of time and energy critiquing: she was inadvertently thinking of herself as separate from nature (Plumwood, *Eye of the Crocodile*).

After reading Plumwood's article it struck me how very different perceptions of crocodiles can be. The popular western narrative of the crocodile as an ancient, dinosaur-like, predatory monster is quite different from the Yolngu narrative of crocodiles. This is clearly illustrated in Ian Dunlop's film *Maḍarrpa Funeral at Gurka'wuy* (Dunlop). This ethnographic film documents the funeral ceremony of an infant, detailing the different songs, dances and phases of a Yolngu funeral in northeast Arnhem Land in Australia. In the final phase of the ceremony, everyone accompanies the men who are carrying the coffin to a place in the trees where the deceased baby is to be buried.

The saltwater crocodile has a deep connection with people belonging to a number of clans along the same ancestral track, in this instance, mourners from the Maḍarrpa clan. A talented dancer from the child's mother's clan assumes the role of mother crocodile, searching for her nest, while two men dance as the crocodile's male offspring. This all-important relationship of mother to son is representative of the Maḍarrpa clan's ties to the neighbouring Djapu clan. The mound of earth from the hole symbolises the crocodile's nest, while the body inside the coffin represents the mother crocodile's eggs (Morphy 'Journey to the Crocodile's Nest').

The dancers adopt the position of the saltwater crocodile with arms extended in a similar stance to the actual species, *Crocodylus porosus*. The lead dancer depicts the crocodile searching for a nest, then with hands and feet, flicks handfuls of earth into the grave, much as a female crocodile would when burying her eggs. He portrays being 'sick and exhausted from laying the eggs', as others cover the 'nest' (101). The lead dancer imitates the movements of a female crocodile tirelessly nurturing her young.

At the homeland community of Yilpara within Blue Mud Bay, near the birthplace of the ancestral crocodile (*Bäru*), a sign on the outside wall of the primary school depicts the school emblem – two crocodiles nurturing and protecting a nest full of eggs – a nice metaphor for the nurturing of the school children within the classroom. This is a very different representation from the crocodile as a beastly, cold-blooded killer. In *The Eye of the Crocodile*, Plumwood writes that because of our western Cartesian dualist mindset we find it hard to accept that we may be food for others and not necessarily top of the food chain under all circumstances. The Yolngu perspective is not a linear, hierarchical view with humans at the pinnacle of the food chain but involves multiple species interconnected through kinship ties and through a connection with the land and water. Deborah Rose points out that in an Aboriginal ecological philosophy the ‘underlying proposition is that life of most things is for others as well as for itself’ (‘Indigenous Philosophical Ecology’ 297).



Figure 1 - The crocodilian eye. Photo: Tambako. Used under CC BY-ND 2.0.

Crocodiles as top predators

The focus of this paper is on the powerful and imposing character of the saltwater crocodile, *Crocodylus porosus*, which can readily turn the tables on humans and, as an opportunistic feeder, has the ability to consume humans as food. Some freshwater crocodiles can also be dangerous to humans once they reach large sizes, particularly the Nile crocodile (*Crocodylus niloticus*) (Nkurunziza). The saltwater crocodile is the largest of all the crocodylians and is often described as being the most 'aggressive' (Kelly). It can survive in many different habitats, such as swamps, mangroves, river systems and even the open ocean. Because of its ability to swim and drift on ocean currents, the saltwater crocodile can be found in tropical areas from India, down through Southeast Asia to Northern Australia. The odd individual also drifts onto remote islands, such as Vanuatu in the Pacific. In many tropical countries the saltwater crocodile is rare, due to pressure from large human populations and diminishing habitat. In Papua New Guinea, Borneo and Timor, crocodiles are significant as an integral part of creation stories, often morphing from human to crocodylian form. (Boomgard, Hicks, Staal)

In Australia, the crocodile is one of less than a handful of species who are capable of eating humans. Sharks and dingoes are the only other perceived predatory threat and both sharks and dingoes are heavily culled in order to control their potential threat. For the Yolngu, there is an acceptance that species as diverse as crocodiles and maggots can play an important role in the ecosystem and are celebrated as significant beings within ceremony (Morphy in Hinkson and Beckett). Ecologists support this view of the importance of all levels within the ecosystem, as recent findings indicate that the presence of top predators, such as dingoes and wolves, are indicators of a healthy ecosystem (Ripple and Beschta, Johnson, et al.). When an apex predator is removed from an ecosystem, then there is a cascade effect where other species, both plant and animal, are detrimentally affected and become rare. Through their role as apex predators, crocodiles should be recognised as keystone species and their presence as being indicative of a healthy ecosystem (Ashton).

Getting to know *Crocodylus porosus*

An indication of the crocodile's adaptive success is that their basic morphology has remained remarkably unchanged over time. Dinosaurs, crocodiles and birds are descendants from a common ancestor, the archosaur. Although crocodiles were classified closer to lizards according to Linnean nomenclature, more recent molecular analysis now classifies crocodiles as being more closely related to birds than they are to lizards (Janke and Arnason). This provides an explanation as to why, like both dinosaurs and birds, crocodiles care for their young and build large nests out of plant material.

The sensory organs – the eyes, ears and nostrils – are usually the only part of the body visible above the surface of the water, similar to a periscope on a submarine. Webb and Manolis refer to crocodiles as having a 'smell brain', as the part of the crocodile's brain associated with the sense of smell is relatively large, indicative of the importance of smell for locating prey.¹ Crocodiles use a sit-and-wait strategy, positioning themselves near a riverbank, or amongst mangrove roots. Large crocodiles are able to stay undetected underwater without surfacing for two to three hours. When a potential meal is at the water's edge, the crocodile launches itself rapidly out of the water and captures it with great force between the jaws. It will then drag the prey down to the water and begin a death roll to unbalance and ultimately drown its prey by forcing water into the lungs (Caldicott et al.).

A crocodile can close its jaws with enormous force. The muscles required to open the jaw, however, are comparatively weak, which means that if crocodiles are ensnared with a noose around the jaws, then the crocodile cannot open its jaws to escape (this is how crocodiles are successfully wrangled by humans). Scientists have found that crocodiles have exceptionally sensitive nodules, or 'domes', on their mouths, which are more sensitive to touch than a human fingertip (Leitch and Catania). These nodules help a crocodile to locate prey: as soon as the crocodile's jaws detect something, they latch onto it. This sensitivity also enables a female crocodile to be remarkably gentle when carrying her young within her jaws.

Crocodiles are not just mean killing machines relying on instinct alone. Researchers now recognise that crocodiles can learn.² In Arnhem Land, when crocodiles were commercially hunted, they became wary of humans. When commercial hunting ended, the crocodiles' anti-

predator behaviour changed over time, as they became a lot more visible to humans, no longer perceiving them as a threat (Webb and Messel, 'Wariness in *Crocodylus*').

Another crocodile skill is a remarkable ability to navigate. At a human-made barrage in the Northern Territory, more than forty saltwater crocodiles swim over 100 kilometres to converge at a specific time of year. Usually individual crocodiles do not tolerate others in close proximity but in this circumstance they make allowances. The crocodiles wait to snatch fish that have been unable to swim upstream until the water levels are above the weir and this only occurs when the tide is particularly high. The crocodiles have somehow learnt where and when this abundance of fish occurs (Attenborough).³

Crocodiles communicate with one another, often through vocalisations. A female crocodile will growl at any intruders encroaching too close to the nest, including humans. When hatching out of the egg, hatchlings vocalise to stimulate the mother crocodile to assist them from the confines of the egg. The mother then carries them down to a crèche in the water, which ultimately ensures against predation by goannas or birds. A male saltwater crocodile will blow bubbles at a female crocodile to seduce her to mate, or growl when defending his territory. Plumwood noted while she was still trapped within the crocodile's jaws that after the death roll the crocodile was growling, as if angry (32). This may have been a territorial growl.



Figure 2 - The saltwater crocodile (*Crocodylus porosus*, Bāru). Photo: Andy Tyler.
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Crocodiles in Northeast Arnhem Land

The Yolngu are the descendants of a people who have lived on the northeast coast of Arnhem Land for more than 40,000 years. During that long expanse of time they have successfully lived in close proximity to a large apex predator, the saltwater crocodile. It makes sense that if one lives in such close proximity to an animal that can readily consume you or your relatives as food, it pays to learn the animal's behaviour, movements, and habits and to learn to live with such a being in a meaningful way.

There are two kinds of crocodile in northeast Arnhem Land, the saltwater or estuarine crocodile (*Crocodylus porosus*) and the Australian freshwater crocodile or Johnston's River crocodile (*Crocodylus johnstoni*). The freshwater crocodile (in Yolngu-matha *ngäw*) tends to be considerably smaller than its saltwater counterpart and is more wary and elusive around humans. Its head is small and slender with a long, narrow snout in comparison to the saltwater crocodile. The shape of the snout provides an indication of the freshwater crocodile's diet, consisting mainly of fish and crustaceans. The saltwater crocodile initially eats similar prey as a juvenile and small adult but the larger an individual grows, the larger the prey becomes, eventually including mammals like dogs, buffalo, horses and humans.

Yolngu represent these two species of crocodile quite differently, emphasising their knowledge of the morphology and behaviour of the two species through stories, song, dance and paintings. During dances representing *bäru*, arms are extended out in front of the body with hands close together but when representing *ngäw*, arms are tucked in beside the body with hands more adjacent to the shoulders. This differing stance is evident in stylistic, figurative representations in paintings. The differences in head shape and snout in the two kinds of crocodile are also clearly depicted.⁴

Unlike most locations throughout the tropics, in the less populated Northern Territory of Australia, particularly in areas within Indigenous Protected Areas, the saltwater crocodile is thriving.⁵ There is considerable debate as to the acceptable population level for saltwater crocodiles, particularly if they are encountered around human habitation. Saltwater crocodile numbers became critically low in the Northern Territory in the 1960s due to commercial hunting pressure and measures were undertaken to assist the population through captive

breeding. The ‘saltie’ made a strong recovery from the time they became protected in 1971. Northern Territory authorities are now concerned that there are too many crocodiles, inhibiting people from enjoying popular swimming and fishing spots. This conflict of habitat use and how crocodiles are being ‘managed’ in the wild has been covered extensively in the media, particularly in the local Northern Territory Times newspaper, where a week will not go by without a story featuring this conflict of interest between human and crocodile (*NT Times*).

Getting to know individual crocodiles

In the small, remote homeland community of Garrthalala, Multhara Mununggurr is the Traditional Owner, or manager, of the place and she is connected with the saltwater crocodile. *Bäru* is a significant totem to her, part of her lineage within the Gumatj clan. Crocodiles are referred to as kin and in turn *Bäru* protects the residents within the community.⁶

Multhara related to me that a resident crocodile often cruises up and down the beach directly in front of the houses. I was surprised that there were only three dogs in a community of approximately sixty residents but Multhara said that five dogs had been taken by the crocodile when they went down to swim in the water to cool down. The dogs were not wary enough and would get too close, barking at the crocodile. Multhara explained the attitude of the community with regard to the crocodiles:

We don’t bother the crocs, we have to leave them alone because they own the water. That’s why we don’t kill the crocs. Sometimes they can be really dangerous, risky, so we have to be careful. People here are aware that there are crocs around and advise the kids not to go swimming in the water.

Multhara related one particular instance to me:

Three girls went down to the beach to collect some oysters and they didn’t know the croc was waiting down in those mangroves. A dog, called Dinosaur, went down after those girls. As he walked along the beach, he noticed that the croc was there and he started barking at those girls, giving them advice. But they ignored the advice that was

given to them by the dog and one of the children was [deaf], so couldn't hear him barking. The dog started running between those girls but the croc [lunged] over and grabbed him. The girls ran home and we could hear the children crying that *bāru* had taken away that pup.

Multhara could see that, to the crocodile, the dog was just a good meal. Yolngu are fond of their dogs but are pragmatic about the crocodile occasionally eating one of them. Multhara told me 'Crocodiles are smart. They have a good memory. They remember if they are treated badly, or if they are treated well.' The head of the crocodile is sacred 'because the head represents knowledge and because the crocodile has an intelligent mind'. Residents at Garrthalala recognise that crocodiles are dangerous, particularly to dogs, but this means that it is important to be aware of the crocodile's presence and habits.⁷

When out on country, whether fishing beside a billabong, on the edge of a river, or from a rock platform, elders look for signs of the presence of resident crocodiles. On one stretch of beach we may see up to four crocodile tracks crossing between the sea and nearby mangrove thickets; or from beneath the slow-moving green river, bubbles occasionally rise to the surface, providing evidence of a submerged crocodile. On one occasion, after arriving at the edge of a billabong in search of yams and bush medicine, Multhara's brother Charlie Mununggurr could clearly see displaced vegetation where a large crocodile had just been resting at the waters edge. He yelled repeatedly, throwing large sticks into the water to announce our presence and to encourage the crocodile to surface in order to give us all a clear indication of where the crocodile was located. If I had been on my own, my immediate inclination would have been to remain quiet in an attempt to *avoid* a potential encounter with the large crocodile but to Charlie it was important to signal our presence clearly to the crocodile (and a large buffalo nearby), so that all are made aware of the intentions of one another (see video segment: <http://vimeo.com/fijnproductions/crocodile>).

On the Coburg Peninsula, West Arnhem Land, a 'boss croc' had inhabited a billabong for over forty years. The traditional owners would talk to the crocodile before entering the water to fish or hunt for file snakes. One of the custodians for the billabong explained to the local newspaper that 'cultural respects were paid on each visit to the site and the resident boss crocodile would seem to respond in kind, by showing itself and then swimming off to tend to its

business.’ On one particular occasion ‘he came up with a large barramundi, he threw the large fish around in his mouth as if to say, “I got this barramundi” – waving it to us and showing us his catch; he then ate it in front of us. It was a very special moment.’ The community felt that it was a sad loss to discover that someone had shot the crocodile between the eyes when he had not harmed anyone (Byrne).

The crocodile in Yolngu cosmology

In Yolngu cosmology the world is categorised and divided into one of two separate moieties, Yirritja and Dhuwa. This Yolngu social system, or kinship system, is referred to by Lloyd Warner as an ‘international’ system, where all beings are interrelated (Warner). Whether it is a type of cloud, a water current, a species of plant, a species of bird, or a human being, everything and everyone is allocated one category or the other and is interlinked, as a means of ordering the world. From an early age a child will know whether she is Dhuwa or Yirritja and from there will know how she is aligned with other beings in her immediate surroundings. Each clan is linked to not just one totemic species but a subset of plant and animal species. These totemic species are shared with other Yolngu clans of the same moiety. An elder of the Gumatj clan describes how the saltwater crocodile links with the Yolngu kinship system (*gurrutu*) in the following way:

Bäru, the Saltwater Crocodile is special for Gumatj people. In the Miwatj [northeast Arnhem Land] area, the stories, songs, designs and ceremony about the *Bäru* belong to Gumatj and Maḍarrpa people. Maḍarrpa people are grandmother clan for Gumatj people. Other people, west of here toward the sunset, also have stories about the *Bäru* when it travelled into their country. Yarrwidi Gumatj people are represented by the tail of the *Bäru* and other Gumatj people are represented by the head and body.

(Munungiritj 4)

Multhara told me about her great-grandchild, who was just turning two, and how he would repeatedly sing a song that he had made up. The song was derived from the tune of a song in English that his mother would sing to him as he went to sleep. In Yolngu matha, he would repeat the relationship between his great-grandmother, his mother, and his father’s totemic

animals in endless cycles. The Yolngu kinship system also cycles around, so that great-grandmother is given the same term as great-grandchild. The toddler would repeatedly sing ‘*gäthu bäru, amaḷa māna, mālu guwak, wäku wäk*’, which means ‘great-grandmother crocodile, mother shark, father nightbird (the koel cuckoo), great uncle crow’. Already, by the time he was turning two, Multhara’s great-grandson associated the kinship connections between family members with the species of animal that is significant to each of them. Because the shark is significant to his mother’s clan, he loves anything related to sharks, including shark toys. He refers to Multhara simply as *bäru* – to him she is ‘crocodile’.

Aboriginal cosmology can potentially be misinterpreted to mean that Yolngu, for example, believe that their ancestor was a crocodile, but in Arnhem Land most ancestral beings (*wangarr*) begin with predominantly anthropomorphic characteristics (Rudder, ‘Yolngu Cosmology’).⁸ This is an easy misinterpretation to make as Yolngu refer to both the ancestral being as *Bäru* and to the actual crocodile as *bäru*.⁹ Ancestral beings have supernatural power with the ability to morph into the form of another being, such as a human or a crocodile. It is this ability to morph between human and crocodile form that links the people within a clan to the saltwater crocodile as a species and in turn it is the signs and marks that are imprinted upon the landscape that connect both human and crocodile to a specific place.

This is demonstrated nicely within a story told to Howard Morphy by a man from the Maḍarrpa clan as an interpretation of a painting featuring *Bäru*. ‘A long time ago *Bäru* (the crocodile) was a man and he had a wife called *Dhamilingu* (blue-tongued lizard).’ After his wife had thrown pieces of hot cooked snail at him while he slept ‘*Bäru* became extremely angry ... He began to act like a crocodile. He seized his wife and threw her into the blazing fire, shouting “I am the *Bäru*, I am the fire, I am the crocodile, I am the Maḍarrpa” (Morphy, ‘Too Many Meanings’; and Morphy, ‘Myth’ 319). In the form of a crocodile, the ancestral being then went from place to place creating sacred elements, the Law (*maḍayin*) and forming imprints upon the land ... ‘when I make the place, when I make the fire, when I make young crocodiles, when I make Yolngu themselves, Maḍarrpa themselves. Yolngu people will do the same things that I do’ (Morphy, ‘Too Many Meanings’ 101). Aspects of the spirit of the ancestor (*wangarr*) can be seen in the way a crocodile behaves and are demonstrated through its considerable power and

strength. The Maḍarrpa clan are the direct descendants of the ancestral crocodile and are therefore linked with the crocodile itself.¹⁰

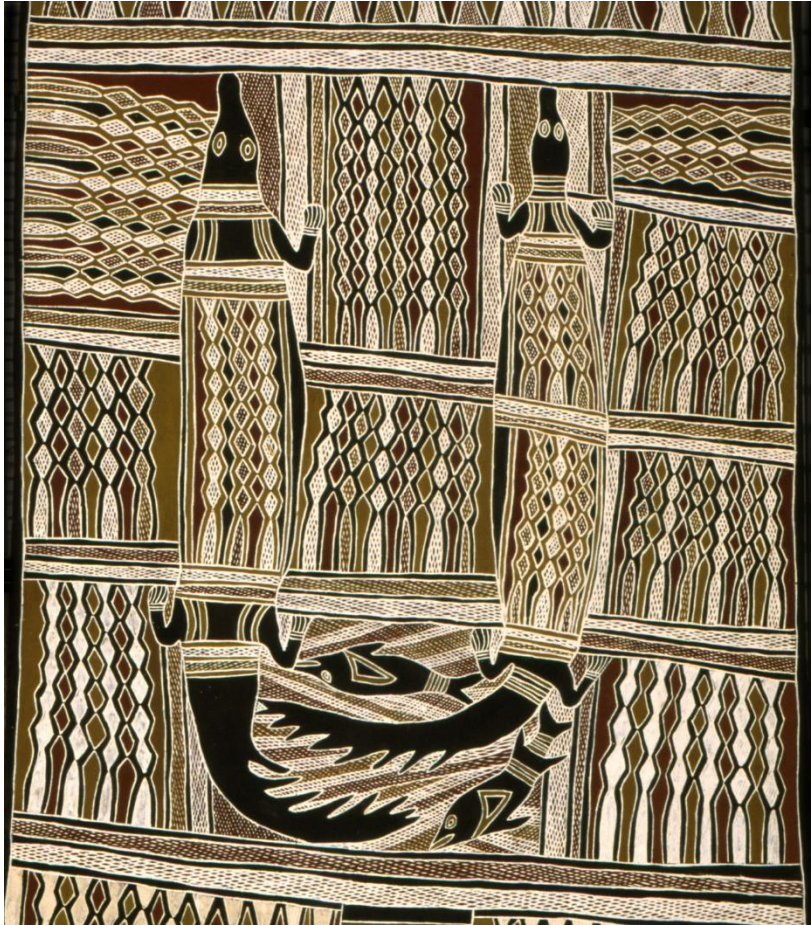


Figure 3 - A section of a painting featuring B̄aru by Gumbaniya Marawili from the Saltwater series. Painting copyright of the artist. Image kindly provided by Howard Morphy and reprinted with the permission of The Buku-Larrnggay Mulka Centre, Yirrkala.

B̄aru is recognised by Yolngu as being part of the Yirritja moiety. For artists of the Maḍarrpa and Gumatj clans, the figurative representation of crocodiles in bark paintings is frequently accompanied by elongated diamond-patterned designs, which are representative of the serrated bumps along a crocodile's back.¹¹ The diamond pattern is also linked with fire

(*Gurtha*), sugarbag or wild honey (*Barnggitj*), and yellow ochre (*Buthalak*), which are all significant for people residing within Gumatj country. From the day I arrived in Garrthalala, the importance of the interconnecting elements of the crocodile, fire, sugarbag and yellow ochre to the Gumatj clan were emphasised to me by Multhara Mununggurr.

The crocodile's connection to the land

Because *Bäru* holds such significance for the Maḍarrpa and Gumatj clans there are certain rules and protocols to be abided by in relation to killing, eating or removing crocodiles from the land or sea. Yolngu do not have qualms about eating crocodiles in general, just as they do not feel too much remorse when eating a yam that is also a significant clan totem. The concern is for crocodiles that inhabit a particular sacred place which is part of the ancestral crocodile-dreaming track. This could be compared to a western ecosystem perspective, rather than a western concern for animal welfare in terms of caring about each individual crocodile. If every animal were to be considered for its merit on an individual level, then Yolngu would find it hard to hunt and kill for food. Their concern is for key places, such as important crocodile nesting habitat, to remain intact for future generations.

Howard Morphy describes an instance that provides a compelling ethnographic description of how crocodiles are intrinsically connected within a totemic landscape:

I was once out hunting with a group of Yolngu along the cliff-tops of Yalangbara (Port Bradshaw). We were at a place where the territories of two clans join. One is of the Yirritja moiety and the other of the Dhuwa moiety. One of the hunters, the leader of the Dhuwa moiety clan, saw a crocodile swimming slowly along in the waters below. He raised his rifle to his shoulder and was taking aim, when suddenly and very dramatically a woman stood in front of the barrel. There was a heated discussion and then the man laid down his rifle. The crocodile had just moved from Dhuwa moiety sea into Yirritja moiety sea ... A short while later, the crocodile turned around and began swimming in the opposite direction. Soon the hunter took up his rifle again, took aim, and followed the crocodile along. This time no one intervened as the rules of the

encounter had been established. But the crocodile must have been aware of the rules since it again turned before entering Dhuwa moiety land and the hunter let it be. (Morphy in Hirsch and Hanlon, 198–99)

Because the hunter was of the Dhuwa moiety, under normal circumstances he would have no restriction in shooting a crocodile for food, and for him there is not the same bond with crocodiles as there is for an individual from the Yirritja moiety. The woman who intervened, however, belonged to the Yirritja moiety, as did her father who happened to be ill at the time. She risked her own life, putting her own body in front of the gun to save the crocodile. Her concern was that killing a crocodile on land belonging to the Yirritja moiety may ‘weaken her father’s spirit’ (198). It was her kinship to her father, and their mutual ancestral connection with the crocodile and the land that were important in terms of the rules of engagement in the hunt.

If a crocodile is found dead clans of the Yirritja moiety bury the crocodile, conducting a funeral ceremony to assist the crocodile in its travels to its totemic well (just as they would for a person from the Gumatj or Madarrpa clans). By the mid-1980s the mining township of Nhulunbuy was well established and at weekends mining families were venturing down onto nearby beaches to swim and go fishing. On one of these beaches a large crocodile would patrol up and down in the water. People from the mining town who wanted to make use of this beach feared for their safety. The crocodile was caught and removed by barge to be placed in a wildlife park near Darwin. When large adult crocodiles are caught they may thrash about violently to try to escape. If the crocodile becomes too stressed, lactic acid builds up in its system and the crocodile can then die (Webb and Margolis). The crocodile in question never made it off the barge and was dead on arrival in Darwin.

One aspect that the authorities had not considered was that the crocodile was residing within Gumatj clan territory. Members of the clan felt offended that they were not consulted about the removal of the crocodile, particularly because it was removed from Gumatj clan land (or waters) and the crocodile was inherently connected to them because of its link with the place. Gallarrwuy Yunupingu spoke out as Traditional Owner of the beach and demanded that the crocodile return to the land where it belonged. The authorities acceded and had an expert taxidermist work on the crocodile to preserve it. A special ceremony was held for the return of *Bāru* on the barge and to lay the crocodile to rest in its homeland. There had been a lack of

consultation with the Gumatj clan, who felt they belonged to that land and the adjacent sea, and a lack of recognition that the crocodile belonged there too (Walker).

Since this occasion, local authorities have been careful to consult with Gumatj traditional owners if a crocodile is to be removed from around Nhulunbuy township. Instead of destroying the crocodile or shipping it off to a crocodile farm, they are relocated by rangers to areas up to 200km away. With their keen ability to find their way home, however, up to half of the relocated crocodiles make their way back to their home territory (or homeland) though often with missing appendages caused by crocodiles that are not tolerant of an unknown individual invading their territory (Walsh and Whitehead).

Near Blue Mud Bay is Garrangali (crocodile nest), which is the ancestral home of *Bāru*. A contemporary Yolngu band is called Garrangali and their title song is about how they are descendants of the crocodile, they sing: ‘Garrangali, this is our country, the land of *Bāru*’ (Garrangali). As the name implies, the mangrove habitat is an important nesting ground for crocodiles. Humans and crocodiles are linked through being born in the area and eventually making their way back to this ancestral homeland when they die.

In 1996, a custodian for this sacred place happened upon an illegal barramundi fishing camp and found the severed head of a crocodile, with a bullet hole between the crocodile’s eyes. This was a deeply disturbing find for the elders of the Yilpara community, particularly because the head of *bāru* is sacred and it was found on sacred clan land. The body parts on an animal are often equated with the equivalent body part in a human (Rudder, ‘Qualitative Thinking’), so for Yolngu this is comparable to severing the head of a human.

As Marcus Barber points out, the fishermen’s intention was clear (299). It is unlikely, however, that the fishermen would have been able to predict the profound impact upon the Yilpara community. Instead of seeking payback, the community reacted in a remarkable way: by painting their sacred designs (*miny’tji*) and releasing them to the wider Australian public in the form of a book and an exhibition. This was with the intention of educating the general public about the sacredness of saltwater and the significance of ancestral beings, such as *Bāru* (Buku-Llarrnggay 6). The lack of respect on behalf of the illegal fishermen spurred Yolngu on to contest recognition of their sea rights within a land rights case in the area of Blue Mud Bay

(Morphy and Morphy). Eight years later, at the beginning of the hearings for the case, another crocodile was illegally shot and strung up by a noose¹² on sacred clan land at Yathikpa.¹³

To Yolngu *b̄aru* is a significant animal that is to be treated with great respect but this does not mean that crocodiles cannot be eaten. Multhara explained how the community had eaten a crocodile, once, decades ago. It was a time when they had no food within the community, ‘only rice’. Her husband gave their adult son permission to shoot a large crocodile to stave off the communities’ hunger. They only ate the meat from the tail and buried the sacred head of the crocodile in the ground as a sign of respect.

From his time in the field with Yolngu between the 1920s and the 1940s, Donald Thomson mentions how ‘the flesh of the crocodile is relished by the natives, who roast it in “ovens” buried in the ground, using hot stones or pieces of termite mound’ (65). Nowadays, crocodile meat and eggs are rarely eaten, mainly due to the scarcity of guns in homeland communities and the accessibility of food items that are less risky to obtain.

The presence of a crocodile requires a heightened awareness and to pay attention to the relevant signs. In his ethnography in the same area of Blue Mud Bay, Marcus Barber relates how a Yolngu man, Dhukal, told him that crocodiles can ‘recognise Yolngu sweat and this means they are less likely to attack’. Yolngu believe that an individual crocodile can detect by smell that a person belongs to a place (Barker, ‘Where the Clouds Stand’). In footage from a 1945 film *Crocodile Hunters*,¹⁴ three men from the Brinkin Tribe in the Daly River Region hunt a crocodile via dugout canoe. They search and probe the surface of the water for bubbles, tracking the movement of the crocodile at the bottom of the billabong. When the harpoon within a bamboo shaft hits the crocodile, one man leaps into the water, wrestling the crocodile to the surface and into the dugout.

Conclusion

Death by a saltwater crocodile is rare amongst Yolngu. When a death does occur there is discussion about why such a death has occurred. Yolngu believe a resident crocodile knows a person’s sweat and can detect whether a person belongs to the land or not. If the crocodile is

particularly large, it may be deduced that an ancestor resides within the crocodile and is seeking vengeance for a wrongdoing, or inappropriate behaviour according to Aboriginal Law.¹⁵

In 1988 a young Aboriginal man was visiting a homeland community and had gone fishing alone in unfamiliar territory on the nearby Cato River. When he did not return, a member of the community alerted the police by radio announcing that the young man had disappeared. He had been on unfamiliar land, far from his homeland near Maningrida in the west of Arnhem Land. The death made sense to local Yolngu because they heard that he had transgressed within traditional Aboriginal Law, an offence that is punishable by death. In fear of his life, he had fled from the trouble within his own community:

One version of the story has it that the senior *Jungayi* or ceremonial policeman of the aggrieved Rembarranga people around Maningrida called on their inherited powers and ‘sang’ a crocodile, knowing that it wouldn’t be harmed by the Yolngu. And they sent that old croc up three hundred kilometers of mangrove fringed coastline and down the Cato River to carry out the sentence of death (McMillan 261–62).

For Yolngu, crocodiles are not animals to be afraid of but are animals to be aware of and to treat with utmost respect. From the Yolngu perspective, part of the reason for the predatory encounter detailed above and for Plumwood’s encounter would be that they were both strangers to the place. They did not belong to the land or the water and the crocodile could detect this through their sweat. The crocodile would have also had the distinct advantage of an element of surprise, as they would not have had an underlying knowledge about the crocodiles in the area. As Plumwood indicated, she had felt the unsettling feeling of being watched and indeed she was. The crocodile would have watched (and smelt) her on the way up the river and had ample opportunity to devise a hunting strategy for when she returned.

Yolngu speak of ‘inside’ and ‘outside’ knowledge, whereby inside knowledge is only revealed to elders who have earned the right to obtain this knowledge, while ‘outside’ knowledge is available to everyone. It is interesting that both Yolngu elders and Plumwood make references to ‘inside’ and ‘outside’ meanings. Plumwood came to the realisation that during her crocodile encounter her ‘inside’ narrative did not correlate with the reality of the ‘outside’ world. Her ‘inside’ thoughts were essentially anthropocentric and egocentric in that

her first thought when being dragged under the water was ‘how can this be happening to me?’ The crocodile attack forced her to give greater agency to the crocodile itself, as a being that is powerful, territorial and hungry and to acknowledge that in being eaten she would have contributed to a wider community beyond the human. Yolngu recognise these elements too but their ‘inside’ perspective encompasses, not just the agency of an individual crocodile, but also other relational and interconnecting factors that act as external forces upon a crocodile encounter, such as the powerful knowledge of elders, ancestral beings and the land itself. This different ‘inside’ perspective enables knowledgeable Yolngu more readily to accept the consequences of a crocodile attack when it does, on rare occasions, occur. Plumwood identifies her changed philosophy, or ‘Eye of the Crocodile’ perspective on the world, as aligning with key Indigenous concepts by ‘understanding life as in circulation, as a gift from a community of ancestors, we can see death as recycling, a flowing on into an ecological and ancestral community of origins’ (*Eye of the Crocodile* 20).

There are layers of meaning that, as one delves deeper, make it possible to uncover different levels of significance. It is easier to grasp these layers of meaning by thinking of *bāru* as perhaps a Yolngu child would, such as Multhara’s great-grandson. Initially a child would not have the depth of knowledge to focus on the hidden layers of meaning but eventually learns the symbolism and interconnections through repeated participation in ceremony as he or she grows older. The child begins by viewing the crocodile as he sees it as an individual in the world, as a definite shape in the water or resting, mouth agape on a muddy riverbank, but also begins to view the crocodile in kinship terms, through an association with extended family members. Through hearing story and song, or seeing bark paintings and dances featuring *Bāru* the child gradually gains more knowledge of crocodile behaviour, its aggressiveness and power, but also its nurturing and caring side, with an ability to care for its nest and young. In walking through country with elders, the child can learn to look for signs that a crocodile is present, like bubbles on the surface of the water or its distinctive tracks in the sand. On deeper levels *Bāru* is later associated with key moments in a person’s life as they age: during initiation, purification or funeral ceremonies. At the end of a person’s life, the crocodile, as ancestral being assists the body to return to the correct place in the world, to reside in clan land (for four separate vignettes, see the film segment: <http://vimeo.com/fijnproductions/crocodile> .



Figure 4 - Tracks of a small saltwater crocodile heading to and from mangroves, northeast Arnhem Land, Australia. Photo: Natasha Fijn. CC BY-ND 2.0.

Notes

¹ Grahame Webb and Harry Messel published many papers on the saltwater crocodile in Arnhem Land, for example, Webb and Messel ‘Movement and Dispersal’ and Webb et al. ‘Growth Rates’.

² Freshwater crocodile hatchlings can learn to avoid eating toxic cane toads (see Somaweera et al.).

³ For crocodile encounters with fording traffic during the wet season at Cahill Crossing, Arnhem Land (including songs about *Bäru* by Yothu Yindi and the Saltwater Band) see <http://www.youtube.com/watch?v=9K7kMPyVxD8> (9 Nov. 2012).

⁴ For figurative representations of *ngäw* by Narratjin Maymurrurru see the Milngiyawuy painting set in the CD-Rom by Morphy et al.

⁵ Jon Altman highlights how within Indigenous Protected Areas, where the predominantly Aboriginal population are responsible for the care of ecosystems, these areas are more environmentally intact than other parts of Australia.

⁶ I refer to kinship in the same sense that Sahlins does, in that it is a ‘mutuality of being: persons who are members of one another, who participate intrinsically in each others’ existence’ (2).

⁷ See also an account of the crocodile ‘Nike’ in Wright et al., an old toothless crocodile who resided just north of Garrthalala.

⁸ This is not necessarily the case for all dreaming stories, as W.E.H. Stanner states: that when certain elements are instituted for the first time, ‘animals and men diverged from a joint stock that was neither one nor the other’ (61).

⁹ For clarity I am referring to the ancestral being with a capital, as in *Bäru*, and the actual crocodile as *bäru*, but there is not necessarily a sharp delineation between the two, as they are in *essence* one and the same.

¹⁰ The freshwater crocodile, Ngäw, is connected with another clan, the Mangalili and with the Milnguya River as a place. Ngäw can also be seen with ancestral fishermen in the constellation of the Southern Cross with the two pointers representing its elongated snout (Morphy et al.).

¹¹ Also see Figure 8.13 in Morphy ‘Ancestral Connections’ for the painting linked to the story of *Bäru* with the elongated diamond pattern in the background representing fire and serrations on a crocodile’s back.

¹² Deborah Rose (‘Wild Dog Dreaming’) describes similar instances where the dead carcasses of another apex predator, the dingo (or wild dog), is strung up by farmers from a prominent tree or fence in order to counter threats to their livestock and as macabre trophies.

¹³ Yathikpa is where crocodile had a fight with blue tongue lizard and, burning with fire, dived into the sea to quench the flames. Within the land one can see *Bäru*’s ‘hands’ transformed into rocks and his tail as a serrated-edged sand bar going out into the sea (Howard Morphy, pers. comm.).

¹⁴ View sequence <http://www.youtube.com/watch?v=NjO7s5slJtU> (12 Nov. 2012).

¹⁵ Yolngu recognise signs that an animal may be wangarr, or a conception spirit: if the animal is particularly large, behaves in an unusual way, or if when killed it is found to contain a large amount of fat (Keen).

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