

Caring as Country: Towards an ontology of co-becoming in natural resource management

Bawaka Country including Sandie Suchet-Pearson, Sarah Wright,† Kate Lloyd* and Laklak Burarrwanga‡*

*Department of Environment and Geography, Macquarie University, Sydney, NSW 2109, Australia. Email: sandie.suchet@mq.edu.au (S. Suchet-Pearson); kate.lloyd@mq.edu.au (K. Lloyd)

†Discipline of Geography and Environmental Studies, Social Sciences Building, The University of Newcastle, Callaghan, NSW 2308. Email: Sarah.Wright@newcastle.edu.au

‡Bawaka Cultural Experiences, c/o Lirwi Yolngu Tourism Aboriginal Corporation, Nhulunbuy, North East Arnhem Land, NT, Australia. Email: info@lirwitourism.com.au

Abstract: *This collaboratively written paper takes the reader on a journey to Bawaka, in North East Arnhem Land, northern Australia, to explore how a Yolŋu ontology of co-becoming can inform natural resource management (NRM) theory and practice. By focusing on the process of gathering and sharing miyapunu mapu (turtle eggs) and the foundational Yolŋu concept of wetj, we challenge NRM to take seriously Indigenous ways of knowing and becoming, and to attend to the vibrant, more-than-human relationality of our world. We discuss this relational cosmology, highlighting the importance of being aware and attentive, as well as the underlying ethical imperative of responsibility and obligation. We argue that as important as the concept of Caring for Country has been for NRM in Australia, it is critical that the human imperative to care for Country is balanced with a multi-directional and beyond-human understanding of the human–Country relationship. This requires engagement with the ways Country also cares and acknowledgement that humans are part of Country and not separate from it. We therefore propose a reframing, that we not only Care for Country but Care as Country. This has implications for understanding the ways that humans can and should relate to the environment as they exist together through co-becoming.*

Keywords: *Caring for Country, Indigenous Australians, more-than-human agency, natural resource management (NRM), relational ontology*

O

Little showers of rain come through Bawaka now. These are lovely, these showers. On a hot day they really cool you down. The little bits of rain come, then they stop, then it may rain again, then stop. These rains make the land and sea beautiful. It's good to go fishing after this rain. And yes, it's good to go and get *miyapunu*, or turtle, and *miyapunu mapu*, turtle eggs, too.

We get *miyapunu mapu*, turtle eggs, from *Lilirtja*, the long beach. There is a big mob of us, *dhaŋaŋ*, so let's get in the troopies, the troop carriers. We'll pile in to the two of them. You can fit a lot of people, *bukmak*, in the back on those sideways seats. Hold on tight.¹

And you hold on tight too as we take you on some (potentially bumpy) journeys: we gather *miyapunu mapu* (turtle egg) with Yolŋu people in North East Arnhem Land, northern Australia; we take seriously the challenge of Yolŋu ways of knowing and becoming; and we explore what *miyapunu mapu* gathering and a Yolŋu ontology of co-becoming² might mean for natural resource management (NRM). In discussing what it means to see humans as one small part of a broader cosmos populated by diverse beings and diverse ways of being, including animals, winds, dirt, sunsets, songs and troop carriers, we argue for a way of knowing/doing which recognises that 'things' can only come into 'being' through an ongoing process of

be(com)ing together. They are never static, fixed, complete, but are continually emerging in an entangled togetherness. Fundamental to this ontology of co-becoming are key lessons around attention, responsibility and ethics. Through sharing the *mapu*, considering the kinship of *miyapunu*, and recognising what is needed for appropriate hunting and gathering, we discuss these lessons and consider the implications of these for NRM theory and practice.

This is a co-authored paper, driven, shaped and conceived through a collaborative effort between four humans – three academics from southeastern Australia and one Yolŋu elder from Bawaka. However, it is much more than that, too, with authorship attributed to Bawaka Country, with explicit acknowledgement that Bawaka Country includes the aforementioned human authors. Country is a word in Aboriginal English which includes not just the territorial, land-based notion of a home *land*, but encompasses humans as well as waters, seas and all that is tangible and non-tangible and which *become together* in a mutually caring and multi-directional manner to create and nurture a *homeland*. For this particular paper, many beings of Bawaka Country have contributed towards its shape and intent – rain showers; *miyapunu*; *mapu*; beach; bay; troopies; seats; tracks; *ganguri* (yams); *garrtjmbal* (red kangaroo); *guya* (fish); songs; dance; tears; *dhalwat'pu* (green turtle); *Dharradharraya* (season); fog on the beach; sand cold under foot; pens and note books; *gaypal* (wattle); *djindjalma* (mud crabs); *bapi* (snakes); *warrkarr* (flower); sweat; fruits; wind; *djāpana* (sunset); Shyrell; Laklak; Sarah; Kate; Sandie; Nathan; Shandi and the Yolŋu family visiting at the point. Acknowledging the authorship of Bawaka Country is important as it decentres the privileging of human authors as the only beings able to control and create, as the sole deciders of content and structure, and opens up opportunities for reimagining and co-creating not only how we write about NRM but how we think about and practice it. Yet there is another point to be made here. Putting separate human names alongside Bawaka Country as co-authors makes for an awkward and possibly misleading grouping (as we have previously done, see also Lloyd *et al.*, 2012; Wright *et al.*, 2012). The four humans do not sit alongside Bawaka Country but are an integral part of Bawaka Country and

cannot and should not be separated from it. It is important thus to clarify from the outset: Country shapes and constitutes the human authors as they shape and constitute Country (Magowan, 2001: 24). This concept of humans as Country, rather than humans in Country is something that we come back to throughout the paper. Humans care for Country as part of Country, not as separate from it. Acknowledging Bawaka Country as author is part of our responsibility as Country, is part of our caring for Country and caring for ourselves. In caring for Country, humans care for themselves; in caring for humans, Country cares for itself.

Dominant industrial resource management practices and discourses tend to insist on strict boundaries between human and non-human beings as they conceptualise static categories such as wildlife, non-renewable resource and so on (Howitt, 2001). They particularly privilege humans as sentient, sapient, intelligent and possessing purposeful agency, and tend to denigrate, ignore or marginalise 'other' beings as instinctive, non-living and/or reactive (Suchet, 2002; Rose, 2011). In this paper, we draw inspiration from Deborah Rose, Tim Ingold and Julie Cruikshank, whose work draws on lessons learnt from their Indigenous mentors to explore metaphysical questions of agency and sentience. We do this with a firm eye on the practical implications this has for NRM, for a more-than-human NRM. As Povinelli (1995) has done in the context of Western legal and institutional constraints, and Porr and Bell (2011) in the context of archaeology and rock art, we gather *miyapunu mapu* at Bawaka to illustrate the importance of a multi-directional engagement for NRM. A multi-directional engagement goes beyond a consideration of only human-to-human relationships to challenge NRM theory and practice to recognise, attend to and take seriously more-than-human agency, the creativity of being, and the lightness of becoming together.

In this paper we discuss our understandings and experiences of a Yolŋu ontology of co-becoming through the gathering of *miyapunu mapu* and the concept of *wetj*. *Wetj*, translated most simply as sharing, is a foundational concept that underpins the ways that Yolŋu live, act, understand and feel. This is sharing understood in a relational and more-than-human way. *Wetj* links Yolŋu with each other and with the

diverse beings of Country in a web of mutuality and responsiveness/responsibility. *Wetj* springs from and supports a Yolŋu ontology of co-becoming which sees all beings, including human beings, as coming into existence through relationships. *Wetj* underpins our journey collecting *miyapunu mapu*, our conversations, our digging, cooking and eating together. It informs our journey and guides it. It is a manifestation of it. Our discussion of *wetj* may seem deep, our description of finding *miyapunu* tracks on the beach mundane, but to make such a distinction is to misunderstand *wetj* and its place in an ontology of co-becoming. Every action, every thought, every feeling, every communication, is a full manifestation of *wetj* and an ontology of co-becoming more broadly. Nothing is banal. Recognising a Yolŋu ontology of co-becoming makes it clear that all humans and non-humans, actors, actants, everything material, affective, all processes and relationships, are not *things*, are not even isolated *beings*, but are entangled becomings, creative and vital and always in the process of becoming through their connections. Our goal in this paper is to deeply consider these insights and understand what they might mean for NRM.

In taking you on this bumpy ride we challenge not only some dominant ways of understanding the world, and dominant ways of doing NRM, but also the way that academic articles are structured. This paper is led by *miyapunu*, the turtle, the *mapu*, the eggs, and our experiences gathering them. We have started each section with quotes that describe our journey together. As we wrote this article, we were led not by academic authorities, although we do acknowledge them as we go, or guidelines of how academic articles 'should' be structured, but by the quotes, by what they tell us. Our story of gathering turtle eggs is not there as an anecdote, it is there as a guide, as a teacher which shaped the paper, informed our thinking and suggested our findings. As a way of acknowledging this leadership, and of revealing another layer of how *miyapunu mapu*, and all that is material, interrelates with what may seem abstract in a Western ontology, we use a *mapu*, O, to mark the beginning of each new section of the paper. Each *mapu*, O, engages with a different aspect of gathering *miyapunu mapu*, of the



Figure 1. Yolŋu people's system of counting is a base five system that draws from a grouping of *miyapunu mapu*, a small pyramid of four eggs with one on top, a *rulu* (Photo credit: S. Suchet-Pearson)

ontology of co-becoming within which it is embedded and that is embedded within it. Yolŋu people's system of counting is based on *mapu* and the sharing of *mapu*. This is a base five system that draws from a grouping of *miyapunu mapu*, a small pyramid of four eggs with one on top, a *rulu* (see Fig. 1). This is a grouping we have mirrored as we go through our sections. Thus, in place of one, two, three, we have O, OO, OOO *miyapunu mapu*, a reflection of an embedded, multi-directional, material system of counting, of sharing and of representation.

As we gather *miyapunu mapu* together, and consider the way caring for and being cared for by Country is always a process of co-becoming, we are responding to calls for researchers and practitioners to respect the ontologies of the Indigenous people with whom they may be working (Howitt and Stevens, 2005; Christie, 2006; Louis, 2007; Carter, 2008). By basing our reflections, as far as we can, on an Indigenous ontology, we confound much of what is taken for granted in both academic research practice and NRM. This means a more ethical practice that genuinely engages with Indigenous ways of knowing and becoming. There is, without question, much to be done, and much to learn through a more ethical and responsive practice.

Despite the importance of ethical relations in research, and the profound insights that can be gained through taking Indigenous experience seriously, however, this is not our only

motivation for calling for a more-than-human engagement in NRM. Attending to relational ontologies only out of respect for *human* ways of doing and being does not go far enough. We argue that attending to a Yolŋu ontology of co-becoming means not only attending to Yolŋu ways of knowing and becoming, but to the ways of knowing and becoming of Country – the processes, memories, ancestors and dreams that co-constitute it (Rose, 2007). This is a deeper ontological commitment, to really, really take seriously our existence as part of the world. It means deeply, entirely rejecting the separation of humans from ‘nature’ and ‘the environment’, of the ‘natural’ from the ‘cultural’. Such distinctions must become nonsensical. Instead, as we gather *miyapunu mapu*, we issue an invitation to you, and to NRM, to open yourself up to the reality of your connections, to the processes of becoming through which we (human and more-than-human beings) know the world and the world knows itself. We invite you to realise that human and more-than-human *beings* never *are* – not isolated, not static, not known – but only *become* as they constantly emerge together. And that this togetherness requires an attention to the ethical responsibilities of care that emerge when we live, think, act and attend as part of the world, rather than distinct from it.

In the next section, OO, we talk about how Indigenous people have engaged with NRM and introduce what we mean by the notion of co-becoming. In OOO we discuss *wetj* and begin to draw out the implications of an ontology of co-becoming for NRM. We then turn to the concept of Caring for Country and consider the ramifications of taking seriously the fact that Country also cares. We propose a reframing, that we not only Care *for* Country but Care *as* Country. Here we also consider what recent Western-academic literature has to say on the notion of sentience and agency. In the penultimate section we discuss how communication and messages work in a cosmology of co-becoming and the importance of awareness and attention. This has implications for understanding the way that humans can and should relate to Country as managers or as relatives in co-becoming. We thus end where we began, with NRM, and the lessons that can be learnt from an ontology of co-becoming.

OO

‘Look!’ cries Shyrell. She can see where a *miyapunu* has been up to lay her eggs. We can see the track going up and coming down and we know a *miyapunu* has laid her eggs there. Let us gather some eggs. We will take them back to the camp to share.

Indigenous peoples and local communities have profoundly challenged the dominance of industrial resource management regimes in a variety of ways over many centuries. They have continued to gather their *mapu*, to interact physically and metaphysically with their homelands, and to shape new technologies to their life worlds and life ways (Wright *et al.*, 2009; Howitt, 2012). They have also challenged bureaucratic agencies, government policy makers, political leaders, scientists and academics to rethink centralised governance arrangements based on Western philosophical traditions (Howitt, 2001). This has prompted much work in NRM focusing on power-sharing arrangements and decentralised resource governance including co-management regimes, community-based NRM arrangements and other efforts at collaboratively addressing the challenges of bringing different world views together to practically address the control and use of what are seen as resources and environments by many dominant systems (Adams, 2005; Berkes, 2007; Yunupingu and Muller, 2009).

The notion of situated engagement reminds us that *how* we engage in relationships is critical to achieving more just and sustainable NRM. Situated engagement is not just about people communicating with each other; it is about the fundamentally different ways people know. Ontological pluralism is at the heart of situated engagement as people and organisations strive to recognise and unsettle their situated differences at multiple scales (Howitt and Suchet-Pearson, 2003, 2006). However, as situated engagement grapples with the challenges of the co-construction of knowledges, understandings and approaches, it can re-enforce an Enlightenment ontological understanding as it focuses on human-to-human relationships and unnecessarily ignores the vibrancy and contributions of other, non-human beings and connections.

Our engagement with Bawaka, with gathering *miyapunu mapu*, is an attempt to go beyond NRM as it currently stands. Through our engagement with a Yolŋu ontology of co-becoming, we hope to contribute to NRM by opening up conceptual and practical ways for natural resource managers to acknowledge and nurture the ways humans interconnect with other 'beings', in an ongoing and multi-directional manner, in a way which acknowledges that all 'being' is always be(com)ing. It is difficult, impossible, to discuss or describe a Yolŋu ontology, to find words for its sacred, profound and meaning-filled concepts not only because it goes deeper, further, than the three non-Yolŋu academics on this paper could even begin to comprehend but also because of limitations of language itself. English is good at ordering, classifying and describing, drawing upon and reinforcing its own ontological heritage (Cruikshank, 2005: 4). Even Yolŋu matha is, ultimately, a language. The concepts embedded in an ontology of co-becoming are beyond language; the ontology is in language but also in gesture, in song, in sensation, thought, spirit, values and dreams; it is in smells and touch and emotion (Magowan, 2001). And it is beyond the human, too, of course. It is in the breeze that runs across a rock in the bay, that lifts a sea eagle in flight, that brings pollen for a flower, that holds the messages of a new season and not for humans only, but for *miyapunu* to mate or to migrate out to sea. And yet here we are, writing in English for an academic audience. And so we try to describe this ontology, these myriad meanings and becomings and how they relate to each other.

Co-becoming. This is our effort to describe a Yolŋu world. All the things, affects, emotions, processes, relationships, all the humans and non-human beings, the smells, the waves, the light, the material and the non-material, the ephemeral, those that were and will be, the actors and actants; these are not things or objects, rather they are constantly in a process of becoming, becoming and emerging together in particular times/places and through particular entangled relationships. This notion of co-becoming challenges the static assumption of an independent, isolated existence often implied by the noun 'being' (human being, non-human being). Here, the concept of a being indicates something separate, something with a

firm boundary. We can know a being, we might know where it begins and ends. 'Being', however, can also evoke a verb (being human, being non-human). It has an active sense, a vitality, a creativity, an openness that acknowledges its becoming, its 'world making' (Rose, 2011). We want to build on this vitality and openness with the notion of co-becoming. In doing so, we reject the distinction between a noun and a verb by arguing that there can be no abstract 'thing' (noun) without the action of doing (verb). When noun becomes verb and verb becomes noun, we find ourselves with be(com)ing.

So, within an ontology of co-becoming, beings, things, non-tangibles have less clear boundaries. They can never be entirely known. They escape us as they are also part of us and part of each other. As Ingold argues, to be alive 'does not emanate from a world that already exists, populated by objects-as-such, but is rather immanent in the very process of that world's continual generation or coming-into-being' (Ingold, 2006: 10). And here lies the hub of an ontology of co-becoming. Not only are beings – that stick, that bottle, that cigarette butt, that emotion, that song and, yes, that person – vibrant, creative, powerful and important in their own right with their own story, song, law and existence, but the nature of their being is relational. They only become (be-come) through relationships, what Rose (2005: 303) and Ingold (2006: 14) describe as a 'domain of entanglement'. They only exist, be-come vibrant, powerful and important, through relationships.

In this ontology of co-becoming, becoming together involves more than the sum of beings. There is something bigger at stake; an enchanted, mysterious, beautiful lightness of becoming, which is often within grasp, yet always alludes. It requires us to pay close attention to our emergence, to the relationships which enable us, and it requires that we do so with an ethics of care. In a Yolŋu ontology of co-becoming, sharing and responsibility are fundamental to this ongoing emergence together. In this paper we consider the implications of this sharing and responsibility through the notion of *wetj*. We do not want to privilege the notion of *wetj* but rather use it as an entry point into the Yolŋu ontology of co-becoming in which all concepts are intimately interconnected. *Wetj* illustrates an

ontology of co-becoming in practice, how Yolŋu and the beings of the Yolŋu world become together.

OOO

Wetj is sharing, the responsibility to share. There is a cycle of *wetj*. From way back Yolŋu people have had *wetj*. Children are still coming up and learning *wetj*. It is still going on. When you go out hunting you get all the *ganguri*, the yams, or all the *mapu*, the eggs, and you know there are people you have to give some to. This is *wetj*; it is like promises. It is a promise, a commitment, to share, to connect to certain people. Like every time a man goes out hunting, if he gets *garrtjmbal*, red kangaroo, or *guya*, fish, he gives some to the mother, father, his family. This is his responsibility. *Wetj* means gift, but a gift that you have the duty to give. The cycle of *wetj* means the connection goes both ways. You give but you also will receive.

Fundamental to *miyapunu* gathering, indeed to all activity, all modes of becoming, at Bawaka, is the concept of *wetj*. If we talk of gathering, if we are to tell you of the process of becoming, of digging up the *mapu*, we are telling the story of *wetj*, of sharing. While gathering of *miyapunu mapu* may be conceived as an exercise in resource acquisition, for Yolŋu it is more fundamentally an exercise in sharing, sharing with other people, sharing with *miyapunu*, sharing with Country. This is a specific kind of sharing, however; one that is both situated and enrolled in a landscape of ethics and responsibility.

First, *wetj* is situated in specific times and places. *Wetj* exists in the now, in the moment of gathering *mapu*, of digging for *ganguri*, of spearing a *garrtjmbal*. While it is in many ways an abstract concept, it does not exist abstractly; it exists through relationships and processes. It becomes with and through the beings of Country as they become together. Thus the *miyapunu* who lays her *mapu*, the *mapu* themselves, the depth of the hole, the density of the hole, the tracks on the beach, all actively contribute to, help determine, what *wetj* might mean in any one moment. They shape what can be shared, what should be shared. A certain number of *mapu* will mean more people can, and should, be involved, for example. There

may be enough *mapu* that the gatherers have a responsibility to give to more distant kin, to nourish more distant connections. These relationships and events thus also shape what commitments are maintained and renewed both between humans and with Country, and how the cycle will replenish and grow. This situates *wetj* both in time and in place.

While *wetj* exists in the moment, in a certain time, it also exists *through* time. It is thus both ephemeral and infinite. It is importantly, as the quote above notes, a cycle. *Wetj* is a cycle that Yolŋu can trace back to their ancestors, that comes from their ancestors, and one that they share with their children into the future. In the quote above, the infinite nature of *wetj* is highlighted by both the mention of ‘way back’ and that ‘children are still coming up and learning *wetj*’. Children become through *wetj*. Indeed, all Country becomes through, and creates, *wetj*. The infinite nature of the cycle also exists through space. *Wetj* connects all beings, ensures the beings become together and shapes the manner in which they become together. This is because *wetj* is not a simple act of sharing between two people, where one gives to the other and expects a gift some day in return. Rather, it is a cycle where gifts given to one may imply the responsibility for a gift given by that person to someone else. Less than a give and take, a simple back and forth, *wetj* is a matrix, a pattern of obligation, a multi-dimensional and ongoing cycle of reciprocity. People, as they are connected through kinship, are also connected through *wetj*, through their obligations of sharing. A Yolŋu person will know their place in the cycle of *wetj*, know who they must share with and under what circumstances. Those people are connected to other people creating a pattern that encompasses all people, that situates them both as receivers and givers of abundance, and that affords certain rights and certain responsibilities both to each other and to Country. For Country is part of *wetj*, too, both as it gives and receives with and from Yolŋu. The giving and receiving of *wetj*, while it is an obligation, is not conceived as a burden but as a gift; the gift of knowing when, where and to who one may share; the gift of knowing when, where and to whom one is connected, of knowing where one fits with Country, of knowing how to act right, to care for Country and to have Country care for you. *Wetj* is thus under-

pinned by generative connections that give a lightness to co-becoming and situate it within relationships of emerging and ongoing care.

The generative connections of *wetj* place Yolŋu not only in Country but also as part of Country.³ Yolŋu's responsibility to Country is based on a co-becoming, a mutually constitutive *intra*-action (Barad, 2008). *Intra*-action, means action within two parts of a whole, rather than *inter*-action, which means between two discrete things. For Yolŋu, to talk of Country, the multiplicity of Country, people's responsibility to Country as part of Country, as mother of Country, as child of Country, is to talk of existence and identity. For NRM, such understandings of Country and humans' place within in it, invites a rethinking of humanity's relationship with the natural world, questioning the ontological separation of human from nature that animates mainstream conceptions of management.

OOOO

The *miyapunu* are special animals to us. We have gathered them in this way for as long as this world has existed. We know how to make sure that we don't take too much. We respect those *miyapunu* and their own lives. We see that their wellbeing and our wellbeing are connected. That is part of the great pattern of kinship . . . We care for them and they for us. We sustain them, and they sustain us. We also sing their songs, dance and cry. The most significant for us, the one with the songline, is *dhalwa'pu*, the green turtle.⁴

In an effort to challenge dominant scientific assumptions of universal principles and attendant management practices, Indigenous people have directly engaged with NRM discourses. In Australia, the challenge is encapsulated by the concept of Caring for Country and the way it has been integrated into resource management discourse and practice over the last 25 or so years (e.g. Elspeth Young championed the term in the late 1980s and 1990s (Young, 1987, Young *et al.*, 1991); the Northern Land Council established a Caring for Country unit in 1995 and the current federal conservation agency continues to frame both its Indigenous land management programmes as well as others through the notion of Caring for our Country). Caring for

Country is at the heart of political debates and power struggles over assumptions of sovereignty and colonial inheritances within NRM in Australia and is by no means uncontroversial or unproblematic. Langton (1998), Yunupingu and Muller (2009) and many others trace and document the fraught manner in which the concept has been applied, appropriated or abused. However, Caring for Country is a means through which Indigenous peoples in Australia have asserted their rights to Country, to 'resources' and to 'environments', and to the decision-making processes which have enabled the appropriation of these concepts to particular Western rational values and uses. Caring for Country in the NRM context is hence a bridging concept as it alerts non-Indigenous resource managers to alternate world views. The notion of Country is dependent upon and claims rights to a specific place and brings particular ontological relationships and understandings with it. The notion of Caring challenges Western management assumptions of being able to control Country and alerts resource managers to alternate ways of relating to Country, including non-tangible relationships of nourishment and care, for example through the songs, dances and cryings which are critical to the relationships of care between Yolŋu at Bawaka and *miyapunu*. This is an effort to bring Indigenous ideas such as *wetj* to a broader audience and to actualise them in mainstream policy contexts.

In this paper, we argue that as important as the concept of Caring for Country has been for NRM in Australia, it is critical that the human imperative to care for Country is balanced with a more multi-directional, generative and beyond-human understanding of the Yolŋu–Country relationship. This means, in part, an in-depth understanding of the ways Country also cares. *Wetj*, after all, is a deeply relational and reciprocal concept. It implies responsiveness and responsibility of humans to Country and of Country to humans (as well as humans to other humans and from beings to other beings) and is premised on their dynamic co-constitution. A strong body of literature exists, focusing on interrelationships between the wellbeing of Country and human health (e.g. see Garnett and Sithole, 2007). As our story of collecting *miyapunu* tells us, 'We see that their wellbeing and our wellbeing are connected . . .

We sustain them, and they sustain us'. However, the ability of not only Yolŋu to sustain *miyapunu* but, crucially, of *miyapunu* to sustain Yolŋu, is not immediately captured in the notion of Caring for Country. Recognising that Country cares, that Country can enable wellbeing, that Country can invite security, belonging and health is a fundamental aspect of Australian Indigenous ways of becoming.

Bawaka Country can and does care for humans, every day, in myriad tangible and intangible ways. It feeds people, offers them shade, shelter and rest; it evokes emotions, healing and spiritual support. It entertains, it warms, and it provides air to breathe and water to drink. Yet this list is obviously one sided. Bawaka also sends discomfort (ants, grains of sand, flies); it sends warnings; it demands appropriate behaviour; it loses things, and conceals, withholds, harms. And there is more because Bawaka Country cares for itself. Certainly, part of this care is care for humans that exist as part of Country, but much of it is care for non-human beings. Bawaka's caring is not human centred. Sometimes Bawaka specifically sustains humans. Bayini, the spirit women of Bawaka, can decide to look after you or assist you in a successful fishing trip. Bawaka can also care to not look after you; if you have not been properly welcomed to Bawaka or you offend Bayini, your health and wellbeing could be compromised. Alternatively, Bawaka's caring for its diverse self could impact on humans in what might be experienced as negative ways. Those mosquitoes, after all, need blood to breed. The fish that is not caught is not dinner; it lives on to share its knowledge and care with Country in the future. Bawaka is a web of ongoing connections and processes in action. Humans are caught up in the web; they help constitute the web, but are not at its centre. As our story-gathering *mapu* tells us, 'We respect those *miyapunu* and their own lives'.

In the academic world, the notion of recognising non-humans as active, sentient and vibrant is one that has gathered momentum in recent years. Work in post-humanism, non-representational theory, affect, new materialism and new vitalism, for example, all take on the challenge of going beyond a human focus, albeit in different ways (see e.g. Alaimo and Hekman, 2008; Bennett, 2010; Coole and Frost, 2010;

Gregg and Seigworth, 2010). Here are non-Indigenous authors attempting to reach beyond a human-centred ontology in innovative and thought-provoking ways. Recent work in new vitalism and new materialism, in particular, aims to 'highlight the active role of *nonhuman* materials in public life . . . to give a voice to *thing-power*' (Bennett, 2010: 36). This work, then, pushes us to acknowledge *things* in their own right. Here, matter is vital, animate and independent. Non-humans are players in the world. Crystals, for example, self organise; Rather than static and unchanging, the crystals order atoms, molecules and ions growing into self-directed, geometric shapes. Worms, regenerate agricultural land. Bacteria in our gut keeps us alive by helping us digest food or, alternatively, killing us. It follows that thing-power, and vital materialism, recognises what NRM's engagement with Caring for Country does not; that things, even things seen as inanimate in a Western sense, may produce effects, may affect. It also points out that the non-human world is not only made up of animals or even plants, but also rocks and pens and chairs, winds and emotions.

An ontology of co-becoming is premised upon an active and lively world. In this sense, Yolŋu ontologies take for granted, see as natural, many of the cutting-edge conundrums that new vitalism and post-humanism are grappling with. Yolŋu know, in a deep way, that non-humans have the power 'to make [human] practitioners think, feel, hesitate' (Stengers, 2010: 15). They know that non-humans have their own law, their own power beyond humans. They also recognise, however, an essential co-constitution between humans and non-humans, between Country and all of its beings. For Yolŋu (and for many Indigenous, feminist and materialist scholars), the essence of being comes about through relationships. We cannot disentangle that 'thing' from ourselves, that thought from your mind, your mind from the sea, the sea from the sea-grass, the sea-grass from the *miyapunu*, the *miyapunu* from the spear, the spear from the salt, the salt from the sweat on our hands, our hands from our thoughts. This is a joint, relational being, a co-becoming, a great pattern of kinship, responsibility, of *wetj*. Through responsibility and kinship, through *wetj*, becoming together is caring, careful. And here our journey, through

wetj, through gathering of the *miyapunu mapu* and through the *miyapunu*'s own journey as she moves from the bays to the open sea and back, comes back to care. Caring for Country. Country caring for us, for itself and for *miyapunu* and *miyapunu mapu*.

In this paper, we acknowledge the agency and authority of Country through acknowledging Bawaka as author. This stretches credibility within a Western ontological framework. How can Country write; how can it contribute? Yet it does so in myriad ways. The three academics learnt about collecting *miyapunu mapu* with Bawaka and Laklak. Bawaka Country, Bayini the spirit woman, the house and long-drop, the road they drove in on, the breezes, the hiring of a troopie, the open air all enabled and shaped their visits, invited them in, made them comfortable, opened the space for Laklak to tell them about *miyapunu*, facilitated the hunting of *miyapunu* and gathering of *mapu*. Hence, the co-authors are entangled in multiple ways – Country becomes academic inquiry; academic inquiry becomes the butchering of a *miyapunu*; the butchered *miyapunu* becomes part of the thread of this article. And in weaving the threads of this article together Bawaka Country (in all its entangled-becoming-ness) reminded the academic authors that there can be no contained environments, no bounded places, and hence helped us develop the notion of *becoming*. Acknowledging Bawaka is thus both an attempt to actuate our engagement with an ontology of co-becoming, to *practice* our claims for thinking NRM differently, and it is a reflection of the real, tangible ways that Bawaka continues to shape, inform and guide our work. This, too, is a manifestation of *wetj*, of reciprocity, sharing and care. There is *wetj* in the Indigenous authors sharing their knowledge with the non-Indigenous authors. There is *wetj* in Bawaka guiding and shaping us all, in our efforts to acknowledge Bawaka here, and in the care we have taken as we try to not dismember it in the process of producing academic knowledge.

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One way that we respect the *miyapunu* is to hunt them at the proper time. For us, the proper

time to hunt *miyapunu* and also to gather the eggs is during *Dharraddharradya*. It is nice and cool at this time of year. There might be a fog on the beach and the sand is really cold under our feet. It is the season for *miyapunu* to come and lay her eggs. *Gaypal*, the wattle, is flowering now. The *gaypal* is a messenger that tells us the time is right to hunt *miyapunu*. The *djinydjalma*, mud crabs, have a lot of meat on them, too; the *bapi*, snakes, are laying their eggs; and the *guya*, the fish, are fat. That is what the *gaypal* tells us when we see its masses of yellow flowers . . . It is like that for all animals, all food gathering. There is a time, a season, which is right. There are connections there between plants and animals and people. If the *warrkarr* is flowering, it is time for stingray; if we sweat, we know the fruits are ripe. This is part of how we are connected and is part of the patterns that underlie our universe.

How do you know when to gather *miyapunu mapu*? For Yolju, gathering *miyapunu* at the correct time is a key aspect of the relationships of care and respect which underlie Caring for Country. As Country nourishes, informs and creates *wetj* and what it might mean at any moment, so, too, does *wetj* help create, nourish and inform Country. Hence, certain animals may only be taken at certain times, or limits might be put on their use. The proper time to gather *miyapunu mapu*, for example, is during *Dharraddharraya*. In order to know when this time is, Yolju attend with great care to the cosmological interconnections which communicate a particular way of becoming (Rose, 2005, 2007). When the *warrkarr* is in flower, it is time to hunt stingray. When Yolju sweat, the fruits are ripening and ready for harvest. For *miyapunu*, Yolju look out for *gaypal* and its masses of yellow wattle flowers. Those yellow flowers alert Yolju. They tell Yolju that the turtles have realised it is time to come near shore and lay their eggs. Hence it is a good time to hunt *miyapunu* and gather *mapu*. *Gaypal* also tells Yolju and others who know how to understand the signals, that the *djinydjalma*, mud crabs, have a lot of meat on them; the *bapi*, snakes, are laying their eggs; and the *guya*, the fish, are fat.

An awareness of connection and communication is key, an attentiveness, alertness. These are messages sent out by flowers, snakes and winds that may or may not be heard by humans. Humans, too, send messages, of sweat, for

example, to fruits that are ripening. Our story of collecting *miyapunu mapu* here provides a tangible example of the agency of the cosmos and the ways humans may attend, or not. As Rose (2005) and others remind us, these messages are not human centric. They are not necessarily directed towards humans; they are not necessarily conscious efforts to alert particular beings. Rather they occur constantly in situated places, bringing particular relationships into being, prompting particular responses and occurrences:

The colour of the flower, the yellow of the *gaypal*, the wattle flower, it tells the cold to come up and it is windy. That will bring the *miyapunu*, the turtle. The size of the flower, too. The big flower is good. The message from the *gaypal* is that we feel the flowering and in our heart, our soul, we feel the future. Before the flower opens, we feel the season will be coming. It is the anticipation of the season, we feel as it is unfolding. Like hoping, wishing, 'Come on *miyapunu*, when is the flowering?' because we feel it is time and we want to eat.

So *gaypal* is not just telling Yolŋu to gather *mapu*. Because of the yellow flowers the cold knows when to come, and the wind when to blow. This is what brings *miyapunu*. The co-becoming of Yolŋu and Country is clear here, too. The message is felt in an embodied way. Communication is affective. It happens inside beings as part of their becoming together, connecting them in profound ways. It may well be beyond humans to understand what something else is thinking or feeling, or whether and how they might think or feel. There is no suggestion that humans can hear or understand all that a rock, a wind or a bottle-top might tell us. Rocks and winds have their own ontology, their own ways of becoming and communicating. This is diversity beyond measure, beyond comprehension. Yet these ontologies, these becomings, these ways of communicating are always relational – they are not human centric, they are non-human dominated, they are not necessarily even comprehensible by humans, but they are co-constituted with humans and with other beings. There is nothing conditional in attending to diverse ways of becoming and communicating. It does not rely upon or expect easy understanding. Such communications may also occur entirely beyond humanity.

Academic notions of more-than-human agency can emphasise a particular aspect of agency that tends to revolve around humans even as it attempts to decentre them. That is to say, much discussion of the agency of matter has been concerned with the impact a certain non-human being or process might have on humans. In a discussion of Hurricane Katrina, for example, Nancy Tuana wonderfully evokes the many ways that the non-human informs, provokes and indeed co-constitutes the human through a process of 'emergent interplay' (Tuana, 2008: 189). Plastics permeate flesh and phthalates pass into the linings of our intestines; the levees constructed by the Army Corps of Engineers make New Orleans and its coastline what it was; the levees, in turn, through their failure during Hurricane Katrina, help bring down a president. Jane Bennett, in exploring the potential for non-human political agency, points out that non-humans may disrupt, catalyse a public, change perception, constitute a public. She asks, 'Do sand storms make a difference to the spread of so-called sectarian violence? Does mercury help enact autism? Can HIV mobilize homophobia or an evangelical revival?' (Bennett, 2010: 107). These notions, while they powerfully problematise the concept that only humans can have agency and that only humans can be political, tend, however, to retain humans as the referent. Publics may be more-than-human, but humans remain central. The power of an actant ultimately lies in its ability to impact upon, to bleed into, humans. A Yolŋu ontology of co-becoming, however, moves humans from the centre. It recognises actions and connections throughout the cosmos that may and often do exist independently of humans. To be a member of this public, to productively take their place in this grand and sometimes mysterious co-becoming, Yolŋu understand and play a role in the web of connections. It is through recognising and respecting these multi-directional connections, the *wetj* of Country, that the cosmos becomes.

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Now it is sunset again . . . we sit here next to the warm fire waiting for that *miyapunu* to be

done. It's nice and cool now in the early evening. The light is just changing colour and soon there will be a lovely sunset.

It has been a long day gathering *miyapunu mapu*, cooking, sharing and eating them; a long journey which challenged our thinking, our becoming, in many ways. As all stories and songs at Bawaka end with sunset, *djāpana*, so we end this paper reflecting on the changing colours of the sunset and the implications of a Yolŋu ontology for NRM.

The light changes colour; the reds, oranges, yellows, whites infuse our being, enable our becoming. The light is part of Country; it has its own agency, its own creativity and vitality, its own song, language, Law and knowledge. In this paper, we have underscored the creativity of all beings in Country. Agency is not just the remit of humans. It is not even just in animals, that we can, after all, see moving, mating, eating. Rather, it is in all things, in plants, water, air and minerals, in dreams, emotions, senses, flows and relationships, and in cups and saucers, sand and spears. The sunset is ephemeral: it is constantly changing, from moment to moment, night to night. It reminds us that Country itself, as well as all the beings in it, including humans, are in a constant state of becoming together. Breathe in the sunset. It is all around you, it is on your skin, in your eyes, travelling down the optic nerve to your brain, in your lungs and there, in your blood, your cells, your imagination, your thoughts, in the look you share with one of your mothers sitting next to you. The sunset, *djāpana*, appears to stand apart, separate, on the horizon, but the light around you, within you, tells a different story. It changes you, too. It speaks to you of *wetj*, of the lightness and care of be(com)ing together. In some ways, this is a simple story. It is a story that tells you that without *wetj*, there is nothing. With *wetj*, however, all belongs, becomes.

Our bumpy journey gathering *miyapunu mapu* is a call to NRM to take seriously the need to attend to Indigenous ways of knowing and becoming, and to the vibrant, more-than-human relationality of our world. The *miyapunu* and the *mapu*, the sunset, as well as the troop carrier, the wind and the *warrkarr* flower, instruct us to take seriously not just the need to care for Country, but to care as Country; to recognise that humans

and Country exist together in a state of co-becoming. Humans exist as part of Country; they are one of many vibrant, sentient, creative beings, both tangible and intangible, affective and material, animal, vegetable and mineral, that make up Country. Humans are one of an infinite number of 'managers' in an NRM context. They stand alongside a wind that calls the turtles in to breed, alongside their own sweat that tells the fruit to ripen. And these acts of communication, or, for want of a better word, of management, are relational. They are embedded in the becoming of the wind, of the turtle, of the human and their sweat. The flowering of the wattle is felt in the heart and the soul of Yolŋu and in the heart and the soul of all beings in and of Country. To manage, whether as a human, an animal, a salty excretion (sweat) or as a wind, is not to stand outside and act upon Country, it is not a matter of inter-action, but is to act within, an intra-action.

The sunset co-becomes. The sunset we watch as we sit by the fire waiting for those *miyapunu mapu* to cook is not there because we sit after a day of gathering *mapu* at Bawaka. It is there because it is there, in this moment, time and place. Yet we are related, that sunset and us sitting here. We need to recognise our fundamental connectedness, our becoming together. If we can do this, an ethics of connection becomes not only possible, but imperative. No longer do ontologically separate categories of humans acting on, and discrete from, a passive nature, make any sense. The disconnections that exist in much of NRM, upon which NRM is premised, become repellent, dangerous and unjust. And here lies the ethics of *wetj*, of an ontology of co-becoming. *Wetj*, the *miyapunu*, the wind and the wattle call to each other and to us. Their call is a call to act, to think, to be differently, to act, think and be in relational, responsible and responsive ways. Can we, in our co-becoming as humans, attend?

The implications for NRM are profound and multi-dimensional. *Wetj* and an ontology of co-becoming confound many Western assumptions. First, it tells us that there is not an easy distinction between human and nature, between what is 'natural' (native animals, native plants) and unnatural (pens, rubbish, exotics), between what is 'nature' and what is a 'resource', or between active managers

(humans) and a passive nature. Sometimes, Country needs humans to get things done. Sometimes it cares for humans; sometimes it does not. Certainly there is no sense that humans can or should control non-humans or that non-humans can or should control humans. Humans are not the focal point of Country. In place of a language of separation, human centredness and control, there is a language of mutuality, of connectedness, of becoming-together, diversely, respectfully, carefully in the world.

If humans are to play their part, to communicate and to act responsively, they need to pay due attention to the connections that bind and constitute them. They need to attend to the messages that they may receive and send, and the ability of other beings to influence, respond and invite action. In discussing an ethics of attention, Rose (2007) emphasises the importance of attending to the communicative nature of the world, and the way humans can understand and become a part of it. She shows how this is based on experience and presence, on taking notice by being in place – an ‘embodied responsiveness’. Natural resource managers are well placed to take up this challenge; they are often embedded in place, in the midst of this cacophony of communication. In place of a blind and deaf manager, cannot resource managers attend to their own becomings in a manner in which they find a partner, a relative even, and recognise how their very nature and work is intertwined with others?

Such a rethinking, a reconstitution, could transform NRM as well as academic practice, reshaping the basis upon which they stand. An ethics of collaboration and care, based on recognition of human and non-human agency, is one that would nurture relationships, responsibilities and accountabilities within and beyond the false dichotomies of researcher–researched, manager–managed. Attending with care to the myriad communications, presences and propositions as we co-become, not merely *Caring for Country* but *Caring as Country*, can contribute to a truly relational co-existence and produce more just, sustainable futures.

Notes

- 1 Many sections of this paper are taken from our recent book Burarrwanga, L., R. Ganambarr, M. Ganambarr-

- Stubbs, B. Ganambarr, D. Maymuru, S. Wright, S. Suchet-Pearson, and K. Lloyd (2013) *Welcome to my Country*, Melbourne: Allen & Unwin.
- 2 We would like to acknowledge and thank Deborah Bird Rose for her incredible generosity in pushing us towards this concept.
- 3 This mirrors Jane Bennett’s comment that while environmentalists live on earth, vital materialists are ‘selves who live as earth, who are more alert to the capacities and limitations – the “jizz” – of the various materials that they are’ (Bennett, 2010: 111).
- 4 *Dhalwat’pu* is particularly important for Bawaka. In other places, different turtles are of significance. There is no one Yolŋu or Indigenous way of becoming or knowing.

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