

SEI magazine

Sydney Environment Institute Magazine 2022-23

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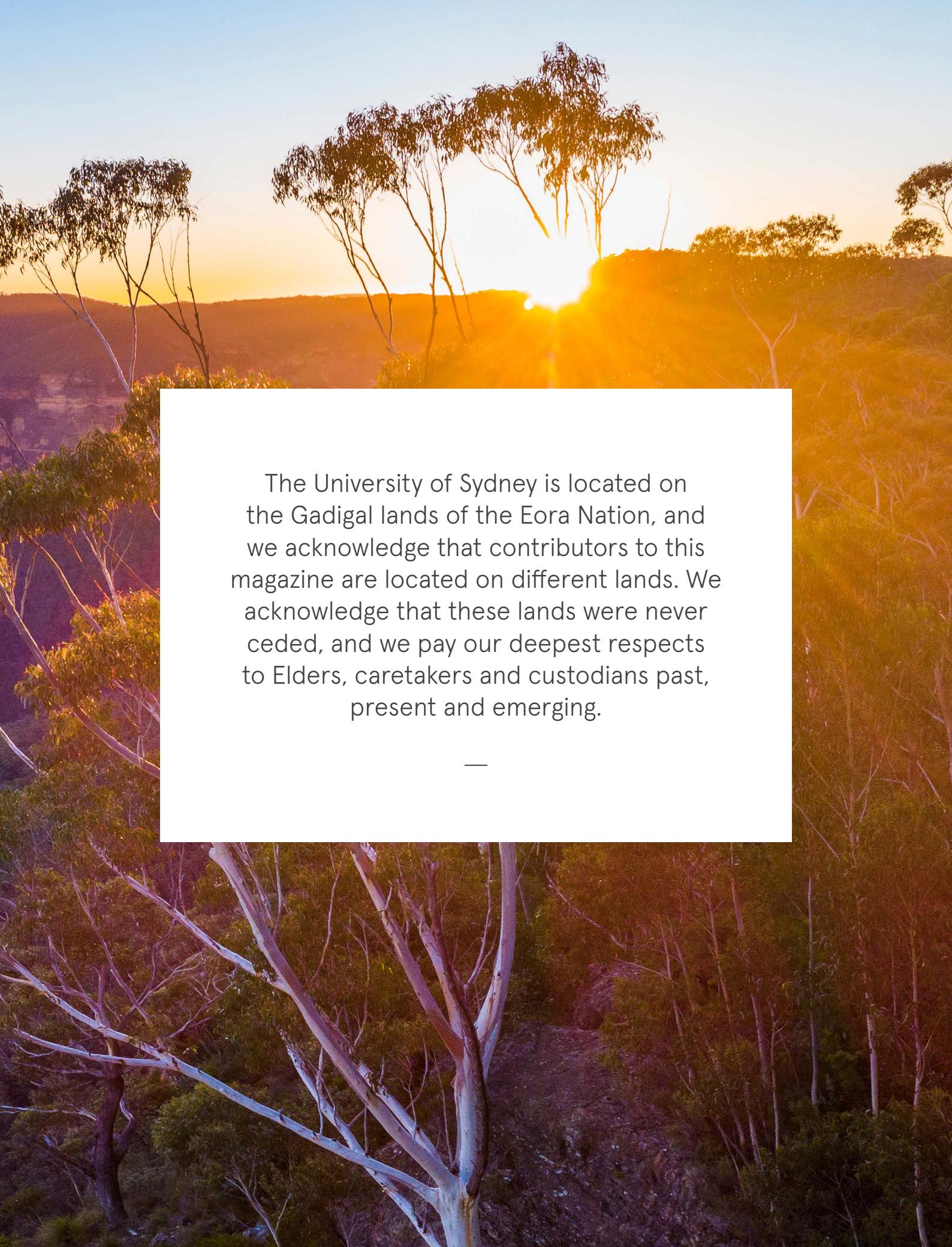
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the natural world



THE UNIVERSITY OF
SYDNEY







The University of Sydney is located on the Gadigal lands of the Eora Nation, and we acknowledge that contributors to this magazine are located on different lands. We acknowledge that these lands were never ceded, and we pay our deepest respects to Elders, caretakers and custodians past, present and emerging.

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Previous page image: Blue mountains via AdobeStock.
Opposite page image: Sunset sky via Unsplash.





Nature feels, feeling nature: ecological emotion research and action in the age of climate anxiety

By Dr James Dunk, Department of History, University of Sydney
and Dr Blanche Verlie, School of Humanities and Social Inquiry,
University of Wollongong

Ecological emotion is everywhere. Think of the shock expressed on social media at the screams of koalas as they were seared by the 2019–20 mega fires, or the horror that the fires had caused the death of 3 billion vertebrate creatures.¹ Think of the dread that many people in the Northern Rivers – or in Mearjin, Rochester, Eugowra, Fitzroy Crossing – feel at the first pitter-patter of rain or the way those on the North Isle of New Zealand are reeling as we write, after the earth and the skies gave way around them. Think what internal mechanics might be at work when we scroll and scroll through images of ‘natural’ disasters taking place throughout the media-saturated world. Or carefully avoid them. Take a moment to consider the world which the children in your life will be navigating in their later years. How do you feel about them? About the koalas, birds, the flooded and stricken, soot-covered communities?

While the finer grain of each individual’s experiences is distinct and unique, a growing body of research literature anticipates the experience of ecological emotion in general terms. We know that the majority of young people surveyed around the world are incapacitated by their worries about the climate crisis,² particularly as it concerns their own futures, and that this ‘anxiety’ is more accurately an oscillating overwhelm of grief, anger, hopelessness and guilt, among other painful feelings.³ We know that there are significant mental health impacts from climatic disasters, including depression, anxiety, post-traumatic stress disorder and suicidality, as well as more disaster-specific conditions such as survivor guilt.⁴ In Australia, “51% of Australians who experienced a climate change-fuelled disaster since 2019 feel their mental health has been somewhat impacted, of whom one in five (21%) claim that the disaster they went through has had a ‘major or moderate impact’ on their mental health”.⁵ We know

less about what works to help people manage these feelings long term other than denial, with avoidance a perverse yet valid coping mechanism for individuals, which unfortunately does little to change the system creating the problems.⁶

To date, human societies have marshalled many ‘solutions’ to the climate crisis through engineering, technology, economics, finance and education. Significantly less attention and resourcing has been paid to the feelings that drive climate crisis and climate action. Yet it is through our affects and emotions that we invest in carbon pricing, solar panels, electric vehicles or sea walls, and in our inner selves that we bear the effects of decisions (not) taken. Ultimately, all climate and sustainability action requires us to be, if not mentally well, at least emotionally capable of showing up, setting to work, and staying at it over time – and to care enough about the situation to bother. This is a challenging balancing act, and yet unless we achieve it we face a critical collapse of the human capital required for any and all efforts towards sustainability and climate justice. Beyond this instrumental reason, the psychological toll of planetary crisis is itself a harm, indeed an injustice, that deserves our attention, resourcing and care.

In the wake of so many compounding climate disasters and the attention the youth climate strikes have brought to the issues of ecological emotions (recall Greta Thunberg’s caustic words at the World Economic Forum in 2019: “I don’t want your hope, I want you to panic, I want you to feel the fear I feel every day. And then I want you to act”)⁷ it should come as no surprise that ecological emotion is being taken up and thought through by scholars in various disciplines, such as education, psychology, sociology, anthropology and environmental history, and increasingly between and across such disciplinary divides.

In recognition of the growing severity of the issues and the burgeoning and diverse

To date, human societies have marshalled many ‘solutions’ to the climate crisis through engineering, technology, economics, finance, and education. Significantly less attention and resourcing has been paid to the feelings that drive climate crisis and climate action.

scholarship investigating them, at the conclusion of 2022, we brought together over 100 people – researchers, but also artists, activists, community leaders and therapists – to explore this great diversity and learn from each other. Across five days *Nature Feelz* unfolded through more than 60 multimodal sessions, including films, performance arts, workshops, workshops, book launches, keynotes and themed panel presentations.

We were thrilled by the energetic responses from across Australia and elsewhere. It was clear that ecological emotion was on the tip of many tongues and at the front of many minds, particularly in charred and sodden Australia, with its more-than-human sacrifice zones and graveyards and its still teeming protected areas. There were obvious groupings – blue humanities, multispecies emotion, fiction and storytelling, eco-anxiety, intergenerational justice, despair and hope – and a few absorbing outliers, like subversive extinction humour, multispecies drag and museological reflections on a flayed thylacine. *Nature Feelz* showcased the breadth and depth of cutting-edge ecological emotion research and action focused in and around Australia, as well as solidifying the importance of this work through firsthand testimony from First Nations Elders and recent climate disaster survivors.

This collection, with its critical and creative pieces, seeks to highlight the philosophical, empirical, methodological, disciplinary and

geographical diversity of the experiences of ecological emotions and of ways of understanding and responding to them. Across poetry, photo essays, personal reflections, narrative analysis and more, these pieces speak of losses and hopes, worlds closing and opening, intimate moments and grand scales of rupture, individual grief and collective witnessing.

We are grateful to the contributors showcased here, and to all *Nature Feelz* participants, for their creative courage and animated engagement with these themes. They reveal a wave of research, teaching, public storytelling and community work which itself is rising above a wave of ecological emotion – bitter, burdensome and dreadful but also, as Kim Gordon explores in her article on fantasy literature, wondrous. We are no longer walking melancholy through a world of wounds⁸ but grappling collaboratively for affirmative ways to live together in it, and with it.

James Dunk is a historian whose research and teaching engages with the climate crisis. Focusing on the mental health and emotional impacts of ecological change, his research moves between environmental history and the history of ecological turns within public health, psychology, and medicine.

Blanche Verlie is a Lecturer in Sociology in the School of Humanities and Social Inquiry at the University of Wollongong. She is a former research fellow at RMIT University and a Postdoctoral Research Fellow at the Sydney Environment Institute. Blanche is a multidisciplinary social scientist whose work focuses on how people understand, experience, and respond to climate change, and how we might do this differently and better. She is the project lead on *Ecological Emotions, Feelings and Affects*, and the author of Learning to live-with climate change: From anxiety to transformation which is [available as a free e-book](#).

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Koala by Annie Spratt via Unsplash.

Creating space for climate distress



Open Dialogue 2022, Acrylic & Inks, Paul Rhodes

As young people contemplate their future in a climate-changed world, expressing their fear and grief to others with similar feelings can allow for a deeper sense of therapeutic relief. Here, Jordan Koder and James Dunk discuss their pilot research project exploring how young people experience climate change and how mental health services could prepare for a rising tide of distress.

By Jordan Koder, Youth Advisor, Headspace and
Dr James Dunk, Department of History, University of Sydney

In August 2021 the IPCC released a report which seriously affected many people with its bleak evaluation and predictions. We heard about and experienced feelings of worry, anger, grief and hopelessness young people may be feeling with the draining activity of doomsscrolling, pouring over internet theorists discussing food wars, mass civil unrest, unbreathable air, the extinction of sea life... all within the next 50 years. The impact of climate change on our planet may have young people experiencing difficulty sleeping, caring about education, or being able to imagine their long-term future. As large areas of our environment decays at a quickening rate, young people are increasingly questioning life milestones, such as the appropriateness of starting a family.

It may feel like a strange time of living in separate realities; many continue on working and living as usual while heatwaves and hurricanes encroach and scientists make increasingly cataclysmic predictions about the near future. Young people often feel as though they are frequently stonewalled by older generations, unable to engage in these discussions. Speaking to those of a similar age, with similar environmentally-aware values, can be a relief.

Climate change concern has begun to appear in therapy rooms. Research shows that clinicians typically feel unprepared to handle it. A survey,

created by Jordan Koder, discovered that young people were sceptical about discussing the topic in therapy, partly because therapists tended to be from older generations. Many had poor experiences speaking about climate change with the older generations, their feelings dismissed as indulgent or hysterical.

Jordan wrote to Paul Rhodes, an Associate Professor of Psychology at the University of Sydney. This led to the development of [a pilot research project](#) by Paul, Jordan and James Dunk – a historian and colleague of Paul's, exploring how young people are experiencing climate change and how mental health services could prepare for a rising tide of distress.

Climate change is already happening, we know it has profound mental health impacts, and we know that young people are experiencing more acute climate anxiety, in Australia and elsewhere.¹ We wanted to know more about how young people were being shaped by growing up with climate change, how intergenerational dialogue could help break down barriers to understanding the effects of climate change and moving toward real action, and how as psychologists deal with acute climate distress they can be more conscious of the larger structures at work. And we wanted to help transform mental health services as the climate crisis grows.



We planned to deploy Participatory Action Research methods to draw young people into our project as collaborators rather than research subjects, and to make ourselves vulnerable together with them. Research methods should accommodate the reality that all of us are drawn up in the climate crisis. We wanted to adapt Open Dialogue – a reflective, egalitarian, therapeutic method developed in Scandinavia to work with voice hearers.

Enlisting Margarete Horstmann, a Master's student in psychology, we assembled a Climate Distress Youth Advisory Group. At first we spent time getting to know one another. As we did, we built a level of trust, fostering the safe space required for further vulnerability. We spoke about how climate change has personally impacted us, about our connections to various places or struggles to find connection, and about the importance of just and equitable responses to the climate crisis. Feelings of overwhelm, denial and anxiety were common. Others told how they had little engagement with climate change, or had no strong feelings about it; later they would reflect that these dialogues had helped them explore in more detail and depth the role climate change was likely to have in their lives, or already playing, subtly but powerfully.

As we shared thoughts and feelings we learned to listen deeply and process slowly. In Open Dialogue there is no need to respond directly when others speak, which helps when the issues at hand seem insurmountable. Towards the end of each session we would sit back and listen as two people reflected on the evening, which would spur further reflections for the rest of us. We began to look forward to our meetings. They weren't 'therapy', but they did provide a safe space to express ourselves. Others said they found them healing, therapeutic, and transformative. It can be easy to distract ourselves from heavy climate emotions, but we found together how beneficial it can be to engage with these feelings together, foregrounding connectedness and hopefulness. This aligns with findings from other explorations of climate distress and group work.²

Over time, we invited academics from across the Sydney Environment Institute into our dialogue. We spoke about the value of art in the realm of climate feelings, non-human perspectives, and about loss, death, grief and the importance of bearing witness. As well as engaging with a wide range of disciplines and experiences, the dialogue quickly proved the value of crossing generational barriers in climate discussions. When several of us demonstrated an Open Dialogue at the Nature Feelz symposium and then opened our circle, we were pleasantly surprised to see that it quickly grew, and continued to grow until it encompassed most of the room. We listened and reflected in respectful silence as people shared their stories. We had again, somehow, made a space where people were connecting over things which were profoundly personal and yet somehow shared. And again, different generations looked each other in the eyes and heard their deeper thoughts and fears. It was wonderful.

So how can we help equip clinicians for climate distress? The method – Open Dialogue – had become a core part of the answer. We want to see clinicians, and perhaps politicians and policymakers, open themselves to the reality of climate distress. Since it's currently being experienced most acutely by young people, this means an intergenerational dialogue where acute distress is shared, heard and felt. We invited psychologists into our dialogue to discuss our findings. Next we want to present our findings formally to Headspace clinicians and produce a guide for clinical encounters with climate distress that will be led by young people, which will draw on the review of climate psychology which we've submitted for publication.

That's a start. But we see the need to build broad awareness about the widespread interior effects of climate change. Acute psychological symptoms – what clinicians might call 'distress' – are the tips of the icebergs of climate emotions, not to be ignored but not to distract attention from what lies below in all of us.³ We're working with industry partners at the frontline of climate distress to develop, test and refine a framework for intergenerational community dialogues which will help identify early signs of acute distress, build better shared understanding of climate emotion at a community level, and draw on it to motivate rapid and effective climate action.

Jordan Koder has been an advocate for youth mental health for many years as a Youth Advisor at Headspace New South Wales. He now continues that passion as a paediatric occupational therapist.

James Dunk is a historian whose research and teaching engages with the climate crisis. Focusing on the mental health and emotional impacts of ecological change, his research moves between environmental history and the history of ecological turns within public health, psychology, and medicine.

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This Place

Reflections on This Place, the University of Sydney's
Camperdown/Darlington campus.

By Associate Professor Rosanne Quinnell, School of Life and Environmental Sciences, Dr Grace Chan, Sydney Conservatorium of Music, Professor Jakelin Troy, Aboriginal and Torres Strait Islander Research, Dr Rebecca Cross, School of Geosciences, University of Sydney and Dr Janelle Evans, Melbourne University



Gadi, Xanthorrhoea by R. Quinnell. (C) The University of Sydney.

We, the authors, have a diversity of cultural backgrounds – Australian Aboriginal, Asian and European – and we have multidisciplinary breadth across the humanities, the arts and science. The Sydney Indigenous Research Network created the space for our meandering dialogues, which have seen the boundaries between our disciplinary selves dissolve to allow our cultural, creative and subjective selves to emerge, merge and flourish. In our conversations we have talked about plants and music through a range of lenses: educational, scientific, cultural, emotional. This offering is a distillation of many joyous conversations focused on plants and music as constructs of This Place, the University of Sydney's Camperdown campus.

For the past 170 years formal education at the University of Sydney has taken place in spaces constrained by sandstone, physically fracturing the connection with the living world. With the overarching trend in Higher Education to substitute real with virtual, we are encouraging dislocation to the place where we gather to learn with our students and with each other. Although connected virtually we are physically uncoupled from the totality of the campus environment, the built and the natural.

As we re-tether back to campus, we are reassessing, recalibrating and reprioritising our values, and attention has turned to what the conduits for reconnection to campus are. A raft of initiatives inviting people to move outside into our green spaces align with the notion of making

connections with the campus environment, for example, orientations to campus, physical activities to support health, the CampusFlora app,¹ encouraging students to learn the Sydney Language,² and processes to support environmentally-focused campus experiments, such as the [Curriculum Garden](#). Of particular significance are the 'Gadi' (*Xanthorrhoea*, grass trees) as these are the signature planting of the University, and the name of the land, Gadigal, is derived from this plant's name.³ The presence of the Gadi plantings are botanic acknowledgements of Country to honour and pay respects to the traditional custodians and Elders past, present and emerging.

Given the importance of the Gadi to the main campus, [we created an imagined collaboration between the Gadi and musical instrumentation](#). This started with a simple transposition of the Gadi into musical notes, the Gadi manifest as music, and then creatively rendered as a composition. The emotional cut-through of this composition was felt during recording, and again when this piece was offered for the first time at the Nature Feelz symposium. Our intention is to share this Gadi soundscape with the University community – to have it reverberate across the campus – making sandstone walls porous to the significance of the plants from This Place.

Rosanne Quinnell is a plant scientist in the School of Life and Environment at the University of Sydney where she leads the Transdisciplinary Research group. She is Deputy Director (Education portfolio) at the Sydney Environment Institute, Chair of the Living Lab initiative, and she is an active member of the Sydney Indigenous Research Network.

Dr Grace Chan MB BS, MMed (OphthSc) performs on organ, carillon and virtual musical instruments. She is interested in the teaching, learning, performance and archival possibilities of new technologies within the rich continuum of traditional pipe organ and carillon culture. Specifically, she is investigating how the use of virtual and augmented reality experiences can contribute to the sustainability of organ and carillon culture at a local, national and global level.

Professor Jakelin Troy is the Director of Aboriginal and Torres Strait Islander Research at the University of Sydney. Professor Troy's research focuses on documenting, describing and reviving Indigenous languages, including her new focus on the Indigenous languages of Pakistan, including Saraiki of the Punjab and Torwali of Swat. She is interested in the use of Indigenous research methodologies and community-engaged research practices. Professor Troy is an Aboriginal Australian and her community is Ngarigu of the Snowy Mountains in south-eastern Australia.

Dr Rebecca Cross is lecturer in Geography in the School of Geosciences at the University of Sydney and member of the Institute of Agriculture. She is a rural and environmental geographer with a keen passion for understanding how local knowledge and innovation can be harnessed for sustainable, regenerative and Indigenous transitions in agriculture and natural resource management.

Janelle Evans is a Dharug Artist, exhibition curator, former Wingara Mura Fellow at the University of Sydney, and is now a senior lecturer at Melbourne University.

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Photography as an “art of noticing” climate loss in more-than-human relationships of care

To better understand the impacts of climate crisis on the more-than-human in her research, Lena M Schlegel engages in a practice of photography as a powerful tool to witness and share relationships of loss and care.

By Lena M Schlegel, Rachel Carson Center for Environment and Society, Ludwig Maximilian University of Munich

Sometimes, the strictly analytical fails to capture the full range of knowledge and experience underlying an issue. This applies in particular to the endeavour of knowing non-human experiences.

In my doctoral research, I seek to better understand how the unfolding climate catastrophe is affecting not only humans, but more-than-human relationships, with a focus on the 2019–20 bushfires in East Gippsland, Victoria. In addition to more traditional methods of social inquiry, I engage in photography as an “art of noticing,” a reflexive ethnography of the sensory kind, where one pays attention to the sensibilities of diverse more-than-human entangled ways of life and makes sense of social structures in light of these diverse experiences.¹

In light of the compounding disasters of climate change and extinction, we² need to come to terms with and repair our relationships to the more-than-human world. We need to work towards ways of living in multispecies care and cohabitation. The practice of photography as an “art of noticing” enables me to uncover more-than-human experiences of the unfolding climate catastrophe and works as a tool for witnessing and sharing those stories of multispecies loss and care.

Lena Schlegel is a doctoral researcher at the Rachel Carson Center for Environment and Society, Ludwig Maximilian University of Munich and a visiting scholar at the University of Melbourne. In her doctoral project, she explores the impacts of climatic disaster on human-nature relations in bushfire-affected communities in Victoria. Her research is situated at the interface of social theory, global governance and environmental ethics, specialising in critical posthuman theories of care and relationality. She is also an active wildlife volunteer and photographer and seeks to combine these practices with her academic work in the spirit of transformative research.



Rainforest refuge at the Errinundra plateau

East Gippsland harbours some of Australia’s most spectacular old growth and Victoria’s last rainforests. Many species, including possums, gliders, parrots and owls rely on large trees for their hollows, which take hundreds of years to form. Here, magnificent Errinundra shining gums and cut-tails tower over rainforest species, like southern sassafras, black olive berries and tree ferns. With links to the Gondwanan forests, the ancient landscape of the Errinundra plateau provides a refuge for wildlife, including threatened species, in a rapidly changing world.

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Logging coupe: the double trouble of logging and bushfires

Devastating bushfires in 2014 and again in 2019–20, as well as ongoing logging operations, have put increasing pressure on these sensitive environments and the animals inhabiting them. The common practice of clearfell logging promotes a high level of disturbance and the regrowth of less sensitive and usually more fire-prone species. This increases fire frequency and intensity and ultimately leads to landscape change and extinction. Despite these impacts, native forest logging in Victoria is set to continue using public funding until 2030: “Not only is biodiversity not worth anything,” a local ecologist states bitterly.

“We even get to pay for it to be destroyed.”



More-than-human loss and recovery

Disasters are a source of trauma for the whole community, which includes the more-than-human world. Locals mourn the absence of birdsong, that beloved tree, the possums at night. They recall the dread of looking up into the burnt canopy, the drive into town through skeleton trees. Their solastalgia reflects not only human attachment to place, but the multispecies relations that make up those connections. Bushfire recovery is not only about replacing assets, but also about repairing more-than-human relationships. This can be observed, for instance, in the coastal community of Mallacoota, known for its abundant birdlife, which is slowly recovering from the devastating fires, where I encountered this beautiful, healthy kookaburra on a scorched branch.

The slow violence of climatic changes on Australian animals and ecosystems

In addition to the stark and immediate horror of disasters, there is also the slow violence of climatic changes and disruption of seasonal patterns. The disorientation and stress that comes with that, however, is not just a human experience. "The animals don't know where they are with their cycles," a staff member of a wildlife organisation explains. "And when you've got animals like flying foxes and birds relying on flowering trees and the trees don't know when to flower, we also have starvation problems." One of the most important pollinators for ecosystems in Eastern Australia, the grey-headed flying fox, is struggling to cope with extreme heat. "On hot days, they start clumping together in trees," she explains. "So, every time it comes up to summer, not only do we have the threat of bushfire, we also have the threat on some of our most important species."



Multispecies care in wildlife rehabilitation

The impact of climate change is particularly felt in the wildlife rescue and caring community. People who have rescued and cared for wildlife after bushfires speak of the horrors involved in witnessing their suffering: kangaroos and wallabies with scorched feet, possums and koalas that can no longer climb for their claws have melted, the many animals who are incinerated and the ones that survive but later die due to injury or starvation. Compared to the three billion vertebrates who are estimated to have been killed in the 2019–20 fires, the number of animals rescued from firegrounds is shockingly low. To sustain caring for and rehabilitating wildlife amid such loss and trauma is only possible by focusing on the individual animal, giving them the best possible care and preparing them for another chance at life in the bush – the ultimate success and a beautiful example of multispecies care and cohabitation.



1. Tsing, A. L. (2015). *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. Princeton: Princeton University Press, p. 37.

2. While these challenges to some extent evoke a collective response, it is important to note that humans are diversely affected by the impacts and carry different degrees of responsibilities for our shared predicament.

Reading the environmental crisis

What happens when climate fiction reflects the reality we are living through? How can this move us to act? Here, Freya MacDonald explores the emotional responses to our current conditions of crisis as experienced and reflected through environmental stories.

By Freya MacDonald, Department of English,
University of Sydney

C H A P T E R T W E N T Y - O N E
At this, Winky howled.
nose dribbling all down his face, "So Dobby and Dumbledore
stem the flow
find work together?" says Winky. And Dobby
on Dumbledore
or

added in his eyes
y Dobby, sir, if
air and Dobby
ignantly from the
heating
illions a week, and
he drive, as though
e frightening, "but
freedom, miss, but
better,"
saying you, Winky?"
Winky, she was wildly
she sat up, she was glaring
n eyes, her whole face
, nor yet getting paid!"
that Winky is properly
But — Winky, come on.
I, not you! You didn't do
you —

There is no singular response to, or way to feel about, the environmental crisis. It hits everyone differently, unequally. It's deeply unfair and unjust that way. We know that those least responsible are the most heavily impacted by it.¹ And those least impacted are often the ones who get to spend the most time researching, narrating, and only slowly feeling it. Most critically, we know that we have everything we need right now to work toward changing this reality. I note these ethical problems early, as they must always be the baseline that grounds any discussion about the merits and capacities of reading and writing about the environmental crisis.

How people feel about the environmental crisis matters immensely. Emotions are at the foundation of action, which makes research on ecological emotions vital. Yet, in the admixture of emotion, cognition and action, across the expanding bodies of research that set out to contend and grapple with the environmental crisis, emotions have remained under-theorised and under-researched.

Multiple factors have contributed to this; 'feelings' have often been relegated to the side of the large-scale adaptation and mitigation strategies at the centre of research efforts. But emotions, "feelz," are everything. And stories can help us better understand them. Given this, environmental storytelling, in its increasingly myriad and innovative forms and genres, is rapidly becoming a critical site for analysis in the environmental humanities and beyond.

Despite their shortcomings, stories about environmental crises are getting better at capturing, representing and distilling an expanded range of lived and imagined experiences – and the feelings that imbue and attend those experiences. They are also getting better at bearing witness to and better at narrating and highlighting the social, political and economic injustices that the environmental crisis has given rise to.

Breaking free of the entrenched hope/despair binary that once seemed the only way to cognitively navigate the environmental crisis, such stories are increasingly grounded in the present and alert to the complexity and multiplicity of what is actually happening now;² No longer drifting into the somewhere far off future worlds of speculative future.

Meditating on, and sitting in recent lived experiences of catastrophic environmental change, many of the very contemporary environmental fiction novels now drill into the absurd reality that despite such catastrophic climate events, such as the Black Summer Bushfires of 2019–20, climate inaction largely remains the norm. Distilling and sitting in this reality is increasingly important as it illuminates a central moment of rupture in the dominant social and environmental imaginaries in Australia that currently shape attitudes and decision-making about climate change.

The recent wave of environmental fiction that has arisen alongside an increase in catastrophic climate change illustrates a growing alignment and dynamism between literary and environmental thought. And this has seen environmental fiction increasingly playing a key role in raising awareness of the crisis we face.³ But a shift is occurring. As more and more people live in and through the dystopias speculative fiction once only predicted, the boundary between reality and fiction in environmental stories has become increasingly flimsy.

On top of this, conditions of crisis have shifted the way people write. This is evident in the powerful and unique environmental fiction written during and in the aftermath of the Black Summer Bushfires. Take novels such as Richard Flanagan's *The Living Sea of Waking Dreams* and Danielle Celermajer's work of creative non-fiction, *Summertime: Reflections on a Vanishing Future*, as but two examples. Read as clusters of emotions, thought and experience, these texts capture a shift in the tone, content, texture and consciousness of environmental stories. Stories about the Black Summer Bushfires of 2019–20, for example, meditate on the emotional soup that inevitably arises from the recognition that the reality we are living in – where these catastrophic climatic events continue to occur, and masses of people continue pressing on without demanding immediate climate action – is absurd.

When I speak of environmental storytelling, I refer primarily to environmental fiction and some of the genre categories that fall within it, such as climate fiction, eco-fiction, solarpunk⁴ and beyond. What is increasingly fascinating about very recently published environmental

fiction is that it captures lived experiences of the environmental crisis in ways that draw readers, quite forcefully and extremely emotionally, into the present reality that climate change is here right now.

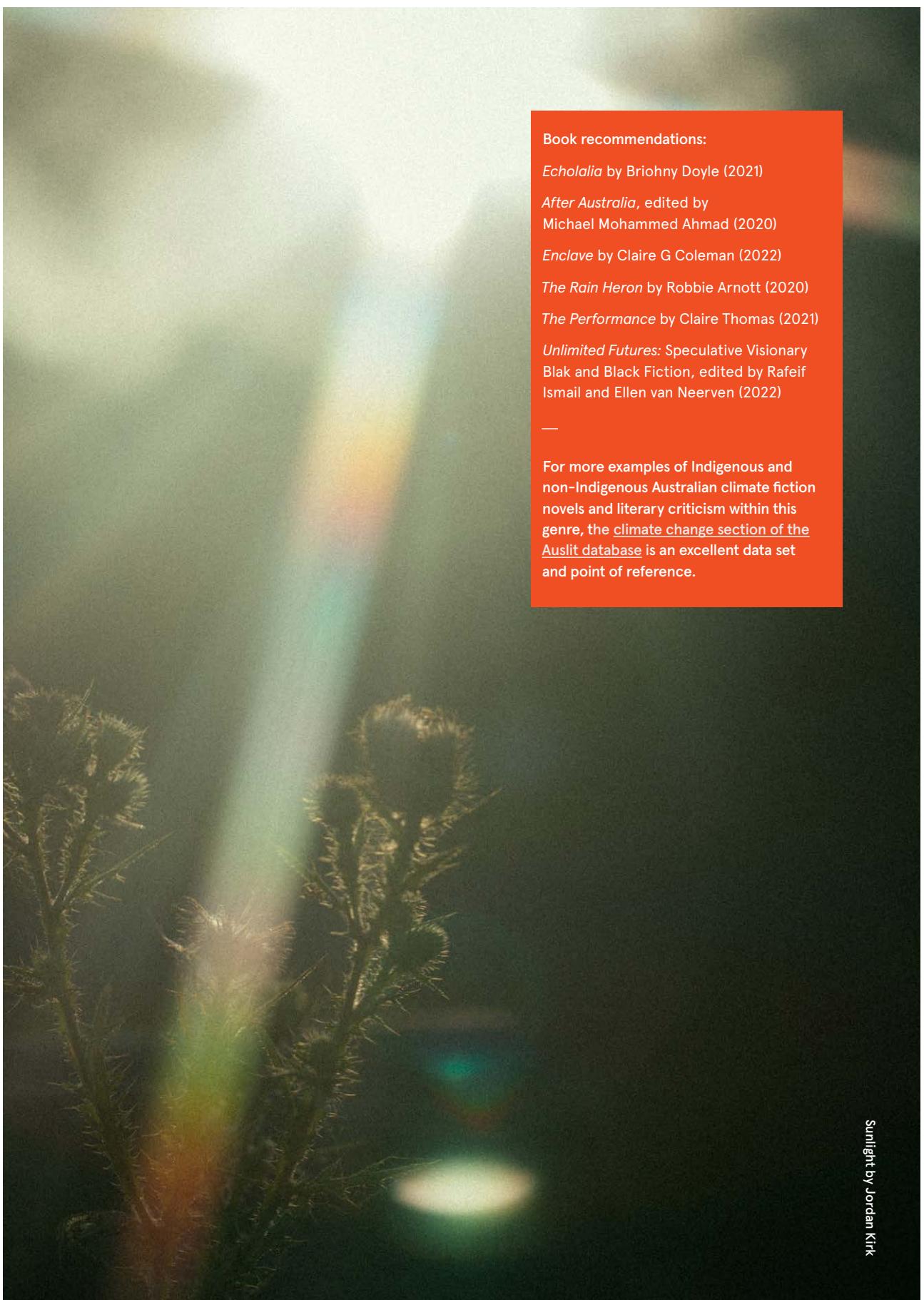
Climate fiction novels, in particular, have come a long way from a once heavy reliance on often well-visioned thought experiments of dystopian futures. Such novels helped, in the past, to teleport often curious and concerned readers into dystopian futures built upon scientific facts and future climate scenarios gleaned from a growing pile of horrifying IPCC reports. Where, perhaps most fundamentally, such novels once helped us ask the question: what does it actually take to imagine and feel your way into a fundamentally different world from the one that we have now?, they now bring readers into the reality that we are currently living in. In this way, they begin to ask a more urgent and grounded question: how do we go on in recognition of the fact that the environmental crisis is here, and people largely remain uninspired to do anything about it?

Environmental fiction intricately plays with and mirrors reality and fiction, and this is why it has such an immense impact on readers, as the dystopic, fictive worlds that emerge in environmental fiction become ever more tangible. This creates a heightened emotional experience when reading such stories. And it is this capacity for heightened emotion that has seen such fiction increasingly play a role in re-sensitising a populace that remains largely desensitised to the environmental catastrophe we are living through.

As researchers and readers seek to grapple with and better understand the broad affective baselines or structures of feeling that currently embed individuals and collectives in times of crisis, reading environmental fiction is a good place to start.

Freya MacDonald is a doctoral fellow and Research Assistant at Sydney Environment Institute. Her PhD research explores and elucidates the relationship between environmental fiction, eco-emotions, environmental, social and crisis imaginaries and social and cultural change in Australia in the wake of the 2019–20 Black Summer Bushfires.

1. Perhaps best formally outlined in the 2022 IPCC Report. The report provides a scientific evidence base to support the claim that those least responsible for climate change are currently the most heavily impacted by it. IPCC, 2022: *Climate Change 2022: Impacts, Adaptation, and Vulnerability*. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. Cambridge University Press, Cambridge, UK and New York, NY, USA, doi:10.1017/9781009325844.
2. Scholars researching environmental emotions seek to identify and elucidate an expanded range of climate and environmental emotions (the emotional states the environmental crisis and climate change in particular spur). In doing this, these researchers help us better understand how climate and environmental emotions inform and motivate individual and collective behaviour in relation to the environmental crisis. Examples of key researchers and texts in the discourse on climate and environmental emotions include: Panu Pihkala's "Toward a Taxonomy of Climate Emotions", *Frontiers in Climate*, (Vol. 3, 2019), Blanche Verlie's *Learning to Live with Climate Change: from Anxiety to Transformation* (Routledge, 2021), and Glen Albrecht's *Earth Emotions: New Words for a New World* (Cornell UP, 2019).
3. See Rebecca Solnit "'If you win the popular imagination, you can change the game': why we need new stories on climate." *The Guardian* (12 January, 2023), and Anindita Banerjee's chapter "Fiction" in *Anthropocene Unseen: A Lexicon* (Punctum Books, 2020).
4. Solarpunk, as described by Jennifer Hamilton "is a movement in speculative fiction, art and fashion, and activism that seeks to answer and embody the question "what does a sustainable civilisation look like, and how can we get there?". "Explainer: 'solarpunk', or how to be an optimistic radical," *The Conversation*, (20 July, 2017), <https://theconversation.com/explainer-solarpunk-or-how-to-be-an-optimistic-radical-80275> for a detailed outline of the solarpunk genre.
5. For in-depth scholarly analysis on the relationship between environmental narrative and emotion, see key texts such as Alexa Weik von Mossner's (2017) "Environmental Narrative, Embodiment and Emotion", *Affective Ecologies: Empathy, Emotion and Environmental Narrative*, Ohio State University Press.



Sunlight by Jordan Kirk

Book recommendations:

Echolalia by Briony Doyle (2021)

After Australia, edited by Michael Mohammed Ahmad (2020)

Enclave by Claire G Coleman (2022)

The Rain Heron by Robbie Arnott (2020)

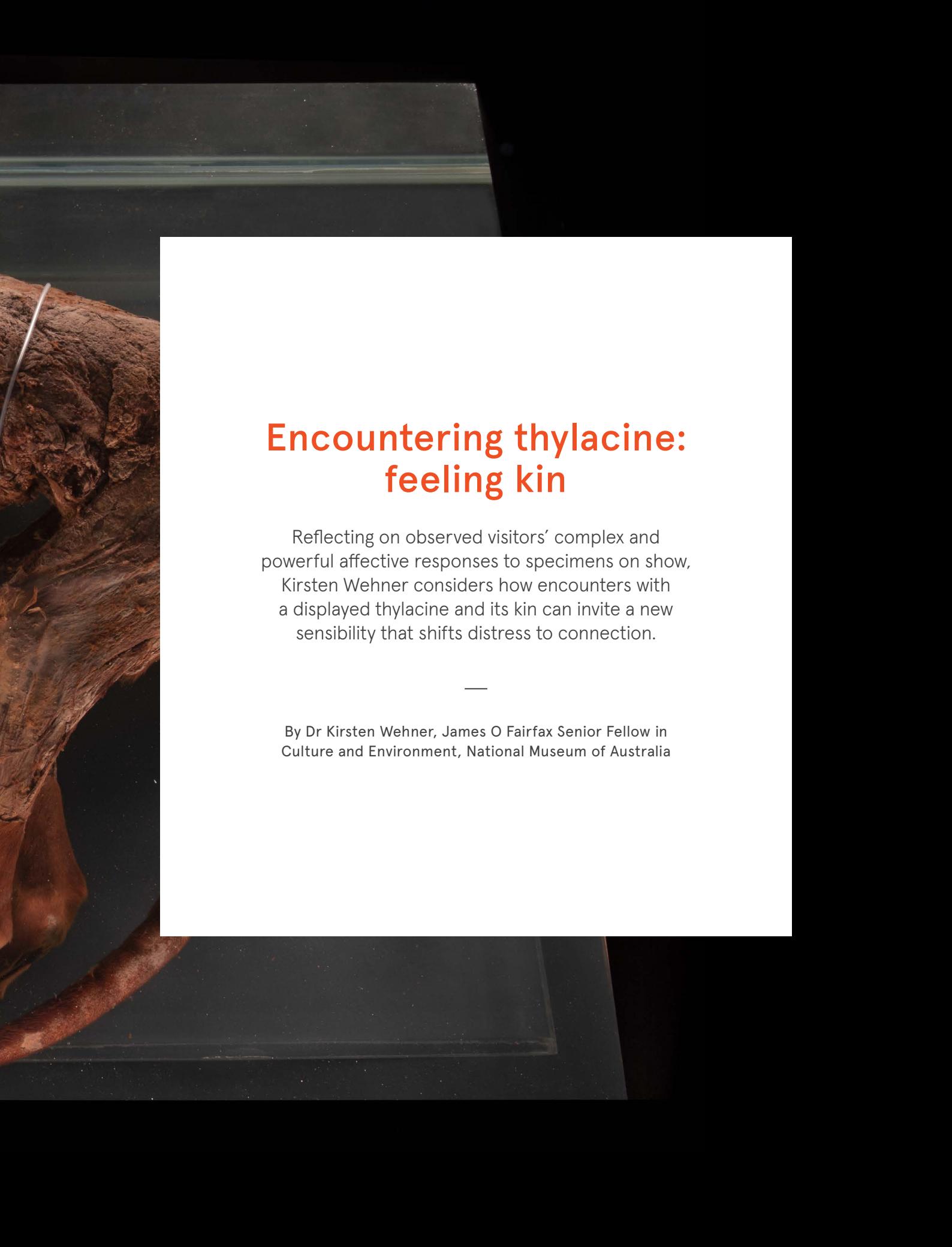
The Performance by Claire Thomas (2021)

Unlimited Futures: Speculative Visionary Blak and Black Fiction, edited by Rafeif Ismail and Ellen van Neerven (2022)

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For more examples of Indigenous and non-Indigenous Australian climate fiction novels and literary criticism within this genre, the [climate change section of the Auslit database](#) is an excellent data set and point of reference.

Preserved adult thylacine, 1920s, National Museum of Australia, by George Serras.





Encountering thylacine: feeling kin

Reflecting on observed visitors' complex and powerful affective responses to specimens on show,

Kirsten Wehner considers how encounters with a displayed thylacine and its kin can invite a new sensibility that shifts distress to connection.

By Dr Kirsten Wehner, James O Fairfax Senior Fellow in Culture and Environment, National Museum of Australia

In the National Museum of Australia's new *Great Southern Land* gallery, the thylacine rests serenely, half-curved on his side in a bath of preserving fluid, his skin flayed away to reveal sinewy muscles and tendons. To encounter this thylacine is to feel shock and horror; to dwell with him is to absorb a kind of deep, creeping sadness.

Given the thylacine's canonisation as an icon of contemporary ecological distress,¹ these responses are perhaps expected, conventional. But are they enough? Enough to honour the thylacine ancestors' 25 million years roaming Earth? Enough to understand what we've lost? Enough to build public understanding that moves beyond enervating ecological grief to enable regeneration?

It is important to recognise the thylacine as a symbol of extinction, but I believe that we need to also explore how we can understand what it meant to be a living thylacine, not abstractly, but in a loping, yawning, nuzzling, biting, making a mess kind of way. We need to invite thylacine to continue their world-making, telling their stories and drawing us in to their realm to re-imagine ourselves as part of dynamic multispecies communities.

The beautiful, distressing flayed thylacine came into human view around 1920, when Melbourne orthopaedic surgeon Sir Colin Mackenzie acquired the slain animal for his then emerging National Museum of Zoology (later the Australian Institute of Anatomy). From the 1930s to the 1970s, the thylacine was probably displayed as a minor note within the Institute's vast exhibitionary arrays. It was a small cog in a scientising machine that invited visitors to detached observation and a sense of satisfaction that the world was there to be captured and dissected and displayed in the interests of humans.

The Institute of Anatomy closed in the mid-1980s, and the newly established National Museum of Australia acquired the collections, including the flayed thylacine.² In 2001 when the Museum opened its exhibition facilities in Canberra, the *Tangled Destinies* gallery (later *Old New Land*) set out to rupture the dispassionate sensibility associated with the thylacine.³

As visitors moved into the gallery, they encountered a large, metal-clad structure. Interpretive text introduced the idea of the "endling" – the last of its species – and narrated how settler society had set off a cavalcade of extinctions across the continent.⁴ Inside the display, the flayed thylacine lay alone beneath the word "Extinct" in large letters, with audio-visual material narrating the story of the species' erasure. The experience echoed that of visiting a mausoleum, fuelling a sense of loss and mourning for the species.

Over the years, the Museum's curators, including myself, observed visitors' complex and

powerful, if often fleeting, affective responses to the Institute of Anatomy specimens. Choruses of "Ah, What, Eew, Oh, Yuck, Terrible, Beautiful" voiced as visitors encountered displays revealed to us the animal-objects' capacities to engage people thoughtfully, performatively and empathetically, indeed to de-stabilise their own collecting history through the animal-objects' immanence in the present. Exhibition experiments explored how to amplify these capacities through designs that opened interpretation to invite grief, but also other varied emotional responses.⁵

As the Museum turned to develop *Great Southern Land* in the mid-2010s, the curatorial team turned anew to consider the flayed thylacine within a framework of more-than-human agency.⁶ Continuing to move away from the thylacine's original collecting context, the curators asked instead what it might mean to consider the thylacine first in terms of its life, rather than its death. The answer was to try to consider what it might have been like to be a thylacine, living and making its story as part of a collaborative and contesting community of people, plants and animals.⁷

Today, the thylacine is displayed in *Great Southern Land's* Life section. Adjacent objects – a possum-skin hat, native hen eggs, a Pacific black duck nest, Eucalypt specimens and a Tasmanian devil skull – evoke his family. A trio of thylacine joeys sculpted by Trawlwoolway artist Vicki West reflects on histories shared by palawa (Tasmania's First Nations) and thylacine. A saw-toothed trap reminds of settler violence while paw-print casts narrate the continuing search for living thylacine. A soundscape of wind and leaves, bird calls and a strange barking plays – what we can record now of what a thylacine heard. Graphics tell the story of the thylacine's Tasmanian homelands, and how palawa and conservationists are trying to restore what they can of this collaborative community.

Encountering the thylacine in *Great Southern Land* is still a sad experience, tinged with grief and guilt. Nestled with his kin, however, the thylacine also begins to invite us to a different sensibility, one that brings distress into conversation with solace, connections and belonging with others. The thylacine, in this context, seems empowered to form new relationships, inviting audiences to contemplation and care for it, and by extension other species.⁸

Dr Kirsten Wehner is the James O Fairfax Senior Fellow in Culture and Environment at the National Museum of Australia. Her research centres on how creative, interpretive and arts-based practices can help transform people's relationships with the more-than-human world in a time of cultural-ecological crises. Current projects include a cultural/material investigation of Australian estuaries, a collaborative study of our continent's little-known threatened places and the activation of cultural institutions for climate action. Kirsten was formerly Director, PhotoAccess (the ACT and region's centre for photography and media arts) and Head Curator, People and the Environment at the National Museum. Her publications include *Living with the Anthropocene: Love, loss and hope in the face of environmental crisis* (co-edited with Jenny Newell and Cameron Muir, 2020, New South Books) and *Curating the Future: Museums, communities and climate change* (co-edited with Jenny Newell and Libby Robin, 2016, Routledge).



Top: Australian Institute of Anatomy exhibit, *Old New Land* gallery, National Museum of Australia, 2013 by George Serras.

Above left: *Great Southern Land* gallery, National Museum of Australia, 2022 by Jason McCarthy.

Above right: *Endling* exhibit, *Tangled Destinies/Old New Land* gallery, National Museum of Australia, 2015 by Jason McCarthy.

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2. Robin, L. (2006). Weird and wonderful: The first objects of the National Historical Collection. *Recollections: A journal of museums and collections*, 1(2), 115-129.
3. *Tangled Destinies* was developed by senior curator Mike Smith, together with Libby Robin, Nick Drayson, Tom Heinsohn, Lynn McCarthy and others. See Smith, M. (2000). Environmental History in the National Museum of Australia. *Public History Review*, 8, 27-43.
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6. *Great Southern Land* was developed by a curatorial team led by George Main, Jilda Andrews and Martha Sear, together with Stephen Munro, Kate Morschel and Jono Lineen, among others.
7. This discussion draws heavily on informal conversations with National Museum Senior Curator Dr Martha Sear.
8. For a broader discussion about the National Museum's thylacine collections, see Wehner, K. *Finding Thylacine*. <https://www.nma.gov.au/explore/blog/finding-thylacine>.



Poems of climate adaptation governance in Barwon South West, Victoria

In this considered piece, Frances Grimshaw presents works of poetry formed out of her Honours thesis to explore the emotions involved in climate governance.

By Frances Grimshaw, geographer and poet

Climate-caused loss is often framed as a problem to solve or an economic risk. Contending that even detached rationality is simply another emotional disposition and governance is a peopled practice, my work investigates the emotionality of climate adaptation governance. The poetry presented here is verbatim research poetry, composed of the words spoken by adaptation governance practitioners in Barwon South West that I interviewed in 2022. I spoke to them about their emotions about climate change, place and their work, and how these entangle and co-create each other. Any words I have added are demarcated in square brackets. Creating poetry from the words of participants deepened my research process, bringing stories into focus and drawing out the emotional qualities of the data.

Frances Grimshaw (she/her) is a geographer and poet living on Kulin Nation land in a place that colonisers call Victoria, Australia. Her academic work focuses on the intersections between science, governance and emotions. During 2022 she completed an Honours project in the School of Geography, Earth and Atmospheric Sciences at the University of Melbourne. This project was supported by the Life Course Centre. You can look at her thesis via [Minerva Access](#), or you can find her on [Instagram](#) or [LinkedIn](#).



Barwon River, Wadawurrung Country, June 2022 by Frances Grimshaw.

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[The ocean] is the heart

If you look at this,
this is no different than a person.
If we think about the planet.
The universe, that's the brains.
[The ocean], is the heart, its pumping life,
up all the streams,
so that's the veins.
It's got kidneys, it's got wetlands
and the kidneys are filtering.
The whole human body is here,
but just in a different form.
That's how I look at it.
You know?
This is the heart.
It's pumping life,
and we keep stuffing it up,
and it's like an old man's heart,
it might stop one day.

Doom-type perspective, or it's my job to progress things

There're those stories that make you feel overwhelmed.
They're always
global-scale,
doom-type
perspective.

It's like, God,
if the ocean's die,
you know how they talk about,
the whole ocean,
the ocean ecosystem,
collapsing.
The whole world just like
ends.
Ends life as we know it.
And so the grief comes.

I was like, oh my God, what happens if
if in like 20 years' time
the eels
the eels can't migrate anymore?
And it's just like, just got this sense of like
a perpetuating, "Oh my God, what happens if?".

I pretty quickly pull myself out of it,
knowing that hasn't happened, yet.
I think what I'm trying to say is
I really try to control my grief.
It's my job to progress things,
to help people.
And when you are at that
global-scale
you have no control.
Like, humans have no control.
Like, you're just an animal.

My grief places are the same as my solace places

I've realised my grief places
are the same
as my solace places.

[The places where]
people have their ashes sprinkled.

[The places where]
people go to, to feel connected to something bigger.
I mean you get here
and you can't wipe the smile off your face even though it's drizzling.

I don't want it to stay the same, it changes,
[I mean] ecology is all about change and pattern over time.
But
there is grief,
because:
It might not function.
It might not provide habitat.
It might end up so degraded
that it doesn't live and breathe like this does.

It's hard to go to the saltmarsh now.
I find it really hard to look at them,
without thinking how they'll be gone
And it really really hurts.

It's when I'm in my solace places, and
the implications hit me
like, tighten around my heart
You know,
they are the grief feelings.

And I look at the landscape,
and I'm moved by the beauty of it,
and I feel it deeply.
But now
there is always now
a bit of grief there.

—



7th Beach, Wadawurrung Country, June 2022, by Frances Grimshaw.



Wonder, fantasy and the natural world

The natural environment has immense power to evoke awe and compassion. Kim Gordon explores the interconnections between Romanticism, wonder and environmental movements – and how such empathy allows us reimagine our relationship and kinship with the more-than-human world.

By Dr Kim Gordon, environmental humanities, RMIT University

"Change the story, change the world" has become a catchcry for social action that recognises the importance of narrative as a tool for sensemaking. The stories we tell ourselves shape our cultural ecosystems – the way we think, feel and act, and how we relate to each other and the more-than-human world.¹

The dominant narrative of Eurowestern thinking positions humanity as separate from, and superior to, nature and the non-human world, which is 'there for the taking', *terra nullius*, mere matter devoid of mind, agency and intentionality.

Australian ecofeminist philosopher Val Plumwood drew attention to the deeply entrenched dualisms that shape this thinking – splitting nature from culture, reason from emotion, and spirit from matter.² Nature/culture dualisms perpetuate the idea of emotion as incompatible with reason, separate use from respect, and reduce the planet to a mere resource, "trading consumability for wonder."³

In the face of global environmental crisis, humanity's interdependence with the biosphere and other living things – not only for material survival, but also for our mental and emotional wellbeing – can no longer be denied. The

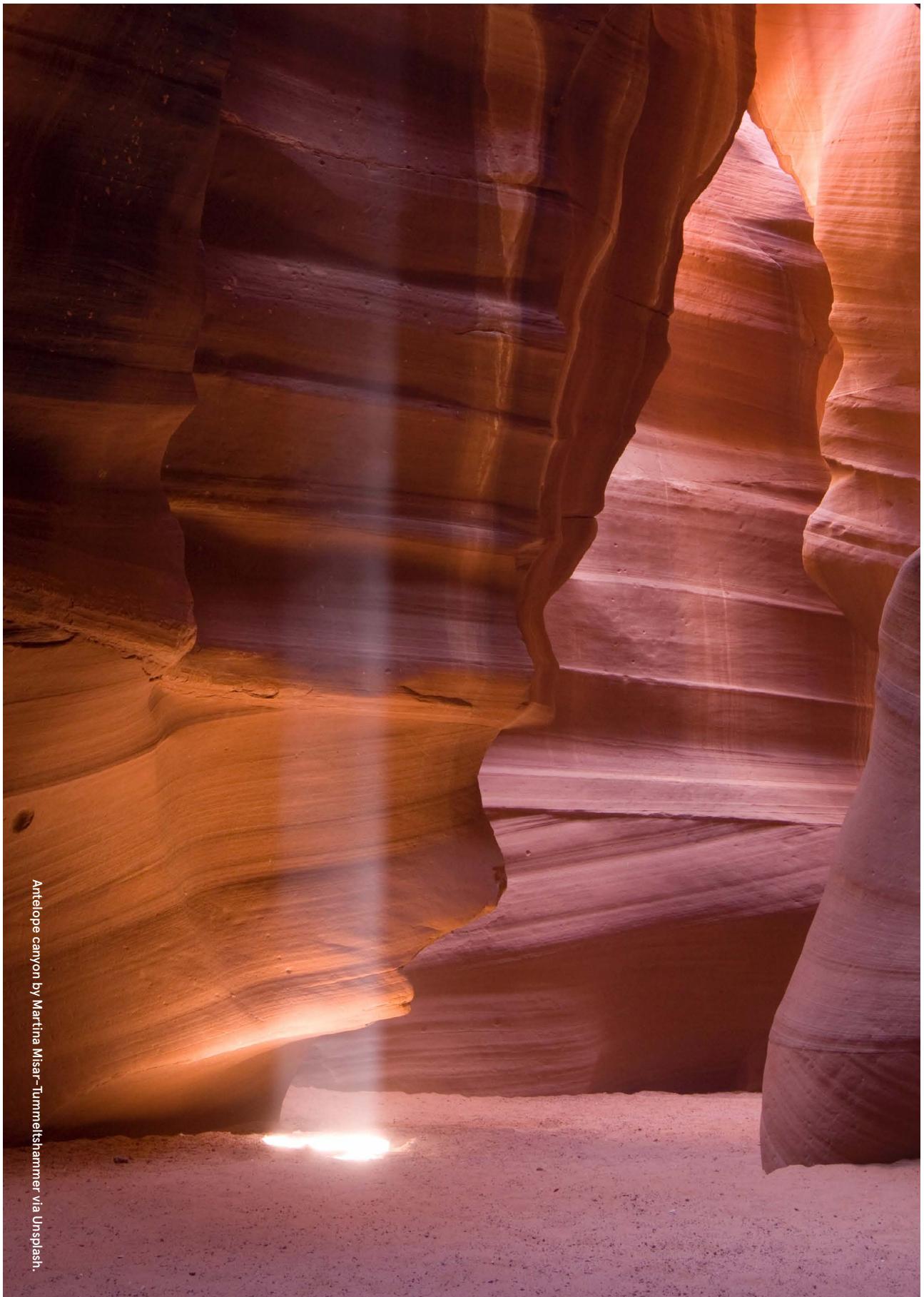
grief, trauma or distress experienced by communities impacted by bushfires and floods, and the rise of climate anxiety as a psychological phenomenon has ignited a growing consciousness of humanity's ecological embeddedness and the power of ecological emotions to change minds and galvanise action.

Recognition of the power of nature to deeply affect us emotionally is nothing new, even in the west. The Romantic movement sought to counter Enlightenment rationalism and the mechanistic worldview of the Industrial Revolution by tapping into natural environments to evoke feelings of wonder, awe and 'the sublime' to open up more spiritual, transcendent ways of apprehending the world. Imaginative literature, art and poetry were the means by which to reveal the "truth of nature."⁴ Wordsworth's poems in the Lyrical Ballads sought to reclaim and recover a space for wonder and enchantment in mundane life, to "give the charm of novelty to things of every day, and to excite a feeling analogous to the supernatural, by awakening the mind's attention... and directing it to the loveliness and wonders of the world before us."⁵

Romanticism had a profound influence on the environmental movement, particularly through the evocation of wonder as a means to change perception. Wonder is not only a feeling, but also an orientation toward openness and empathy, which – according to philosopher Martha Nussbaum – is the foundation of a compassionate society.⁶

Rachel Carson's seminal work of environmental activism, *Silent Spring*, drew on a wide range of ecological emotions – fear, anger, grief, wonder and reverence – as key ingredients for motivating environmental concern. Published posthumously, *The Sense of Wonder* underlines the centrality of wonder to Carson's thought as an antidote to disenchantment, and as a way of orienting oneself in the world that can be purposely cultivated to sensitise the mind to the aliveness of nature.⁷

It is also no accident that Carson, strongly influenced by Romantic nature poetry, invoked the language of fairytale to convey the devastating impact of chemical pesticides as an "evil spell" in the opening of *Silent Spring*.⁸ Romanticism turned to pre-modern European folklore and fairytales, rediscovering in Gothic



Antelope canyon by Martina Misar-Tummettshammer via Unsplash.

medieval romance, narratives rich in metaphor and symbol, poetic language that could excite the emotions and set fire to the imagination.

The legacy of Romanticism continues in fantasy literature. Growing out of the popularity of JRR Tolkien's neo-medievalist romance, *The Lord of the Rings*, contemporary Romantic fantasy reinterprets fairytales, myth and legend, and reworks pre-modern symbolic narratives to imbue them with new cultural meanings.⁹

Tolkien understood the fundamental impulse of Romantic fantasy and fairytales as the desire to recover a sense of the world "apart from ourselves" – potent in its otherness and unchained from the "possessiveness" and "appropriation" of the anthropocentric gaze.¹⁰ He critiqued the instrumentalist rationality of modernity by giving voice to trees and acknowledging that non-human life has agency and intentionality independent from humanity.

Fantasy in the Romantic tradition problematises nature/culture dualisms through its engagement with the realm of the monstrous, eerie and supernatural, evoking wonder through the narrative conventions and symbolic language of fairytale that invite empathy with more-than-human beings and worlds.

Plumwood acknowledged her indebtedness to Romantic philosophy and cautioned against modernist criticism's denigration of Romanticism as "irrational", identifying such dismissal as a tactic to "delegitimate writing which gives us other ways of seeing."¹¹ She saw value in stories that "re-open the door to the

world of wonder" as a means to challenge rationalist dualisms by "re-writing the earth as sacred" – a view upheld by many Indigenous cultures, where the sacred and spirituality are valued as important contributions to ways of knowing.¹²

In seeking to change the story of western modernity's relationship with nature to one where the Earth is fully alive and deserving of our care and respect, Plumwood offers wonder and the power of narrative to change beliefs and perceptions. In the words of anthropologist Deborah Bird-Rose, *[E]ven if we do not fully understand it, the earth speaks too... In a sentient world, the world speaks. Its great story is that it speaks, and our great story is that we are part of its speaking.*¹³

Being present and open to the wonder of the world around us in its many speaking voices is a pathway towards what philosopher Bruno Latour calls "learning to be affected," wherein a transformed relationship with earth others in turn transforms the self, leaving neither untouched.¹⁴ It widens the possibility of creating new ways of living in a climate-affected world, offering hope, and a greater sense of kinship and emotional belonging.

Dr Kim Gordon has a PhD in interdisciplinary Medieval Studies from the University of Sydney and a Masters in cultural heritage management from the Australian National University. She works at the interface of research, policy and practice, facilitating research partnerships and collaborations across multiple sectors and institutions in Australia and internationally. She currently teaches in environmental humanities at RMIT University, and researches how culture shapes responses to the environment in the context of climate change, disaster resilience and culturally sustainable development.

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10 steps to resilience and empowerment in a chaotic climate

How is resilience and heart-centred work central to activism?
Elizabeth Wade of the Good Grief Network considers the concrete steps we can take to inform greater connection, belonging and strength in difficult times.

By Elizabeth Wade, Good Grief Network



We are living in times of increased isolation, division and polarisation, manipulation and oppression, and stolen attention. Ever more people are experiencing distress in response to the state of our world, environment, society and culture. Many issues interrupt our ability to cope, to navigate the challenges of life in these times, and to work *together* for change, towards better futures. If we attend to it carefully, our distress can help point us along the paths forward.

The [Good Grief Network](#) (GGN) creates spaces to gather in community, to process the painful feelings and realities of our time, and commit to meaningful action. Founded in 2016 by LaUra Schmidt and Aimee Lewis Reau, the GGN launched its flagship program [10 Steps to Resilience and Empowerment in a Chaotic Climate](#) in 2017. The 10 Steps emerged from LaUra's Master's research in Environmental Humanities at the University of Utah, where she studied innovative means of creating resilient humans.

GGN describes its program as a peer-to-peer support program, where participants undertake heart-centred process work in small groups. Over 10 weekly sessions, the 10 Steps Program leads through the severity and uncertainty of the climate crisis to a series of reflections on mortality, drawing to the profound need for inner work amidst the turmoil. The further steps help participants increase their awareness, practice gratitude, witness beauty, build community, rest, and continue on, while keeping the experience of grief in the foreground. Prompted by texts and resources, participants take turns to check-in and check-out, sharing their thoughts, feelings and experiences. The

program brings people together to listen to and learn alongside each other. The program helps people explore new ways of thinking about the systemic predicaments we face. Space is made for participants to be with and process feelings together, while developing skills for coping and resilience. As a result, participants are empowered to explore and act upon expanded ideas of how we can address the critical issues of our times. I went through the 10 steps myself in 2019. The following year I began facilitating groups myself and completed the FLOW Facilitation training.

I have now co-facilitated nine groups, with 67 participants completing all or most of the steps with me. They have ranged from 16 to 75 years old, and come from all walks of life. Many were currently involved in climate activism, or had been. I have been moved by their responses from participants, and want to share some of what they have shared in surveys, emails and conversations about how the program has changed them.

10 STEPS TO RESILIENCE AND EMPOWERMENT IN A CHAOTIC CLIMATE

- 1 Accept the severity of the predicament
- 2 Be with uncertainty
- 3 Honour my mortality and the mortality of all
- 4 Do inner work
- 5 Develop awareness of biases and perception
- 6 Practice gratitude, witness beauty and create connections
- 7 Take breaks and rest
- 8 Grieve the harm I have caused
- 9 Show up
- 10 Reinvest in meaningful efforts

Connections and community

Many participants remain in touch with their groups, via online reunions, book clubs and writing groups, email, chat groups, phone calls and meeting up. People speak of forming deep connections and a community of support, which provides comfort, understanding and warmth, and helps to alleviate anxiety and allow for empowerment.

Deepened understanding of the complexities of our times

Participants speak of learning from the insights and experiences of others in their group and how this has continued to influence their thinking in a positive way. They also say the program content and resources have expanded their understanding of the systemic and interconnected predicaments we face.

Changes in ongoing emotional experiences

Participants say they find validation and comfort in hearing others share their emotional responses, both similar and different, and there is an overall sense of creating space for a range of simultaneous emotions – peace and joy alongside anxiety, love and gratitude alongside grief. They report feeling less overwhelmed and more “on an even keel” in their responses to the state of the world, with more skills for managing their emotions. Participants say they have gained strength and fortitude to sit with discomforting interpersonal situations and to respond to new challenges as they arise.

Personal growth and learning

Participants describe the program as transformative and empowering. They say that it has enabled more comfort with integrity and self-acceptance. Throughout the program, participants practise skills such as deep listening, honesty, vulnerability, processing feelings, doing inner work, and having openness to a variety of perspectives and experiences. Participants are encouraged to practise self-reflection, deepening self-awareness, slowing down, holding space together for witnessing and being witnessed, and being with the questions, the not knowing, and the discomfort of growth and learning. Participants report more confidence and resilience, and say they have a framework for ongoing reflection and learning.

Changes to actions taken in the world

Participants report gaining courage and affirmation in walking their path, a sense their life is meaningful, and feeling they have power to create positive change inside and out. They report an expanded understanding of how to make change in the world, and the kind of change that is needed. They speak of being motivated by love, instead of simply acting in response to fear or anger.

I feel a deep sense of the strength the program has given me and an expanded capacity for coping, learning, and exploring at the edges of our times, seeking what new worlds might be possible. Participants always take different things from the program. The invitation is to go deeper into whatever resonates and leave behind whatever doesn't, and the hope is that each person finds what they need to support them and discovers their own path forward, with the support of the GGN. We want to empower people for these times, working for change within as we work for change in the world, for a [heart-centred revolution](#).

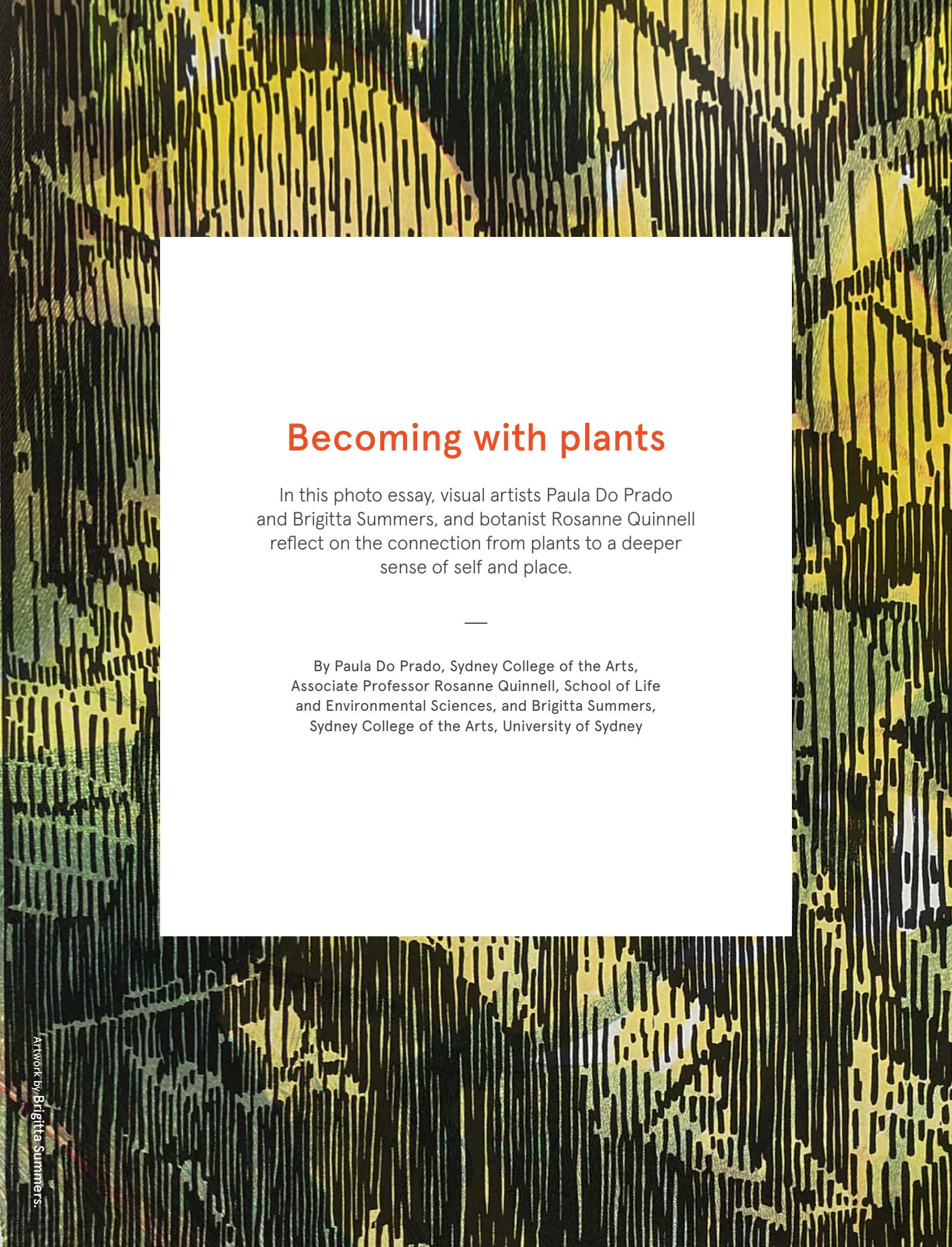
Elizabeth Wade aims to live a meaningful life and contribute to the world, summarising her life purpose and vocation as “healing work for people and the planet”. This currently mostly involves both paid and volunteer work in environmental and social justice activism, facilitating group work, and engaging in local community building activities with a particular focus on cultivating a culture of collective care in all we do. Elizabeth’s education, training and interest fields include science, philosophy, teaching, spiritual studies, counselling, dancing, music, healing modalities, group work, communication, parenting, facilitation, activism, change making, organising, decolonisation, learning from First Nations people and knowledges, and about ways of living in alignment with nature and being of nature.

“The good grief course was invaluable, and came at a moment when I was feeling disillusioned and anxious about the future. I felt safe, and genuinely heard, like each session was a door I could prise open a fraction more each time. I felt like I was getting to see the truth of my fellow participants as we all became accustomed to being so raw and vulnerable.”

– 10 Steps program participant



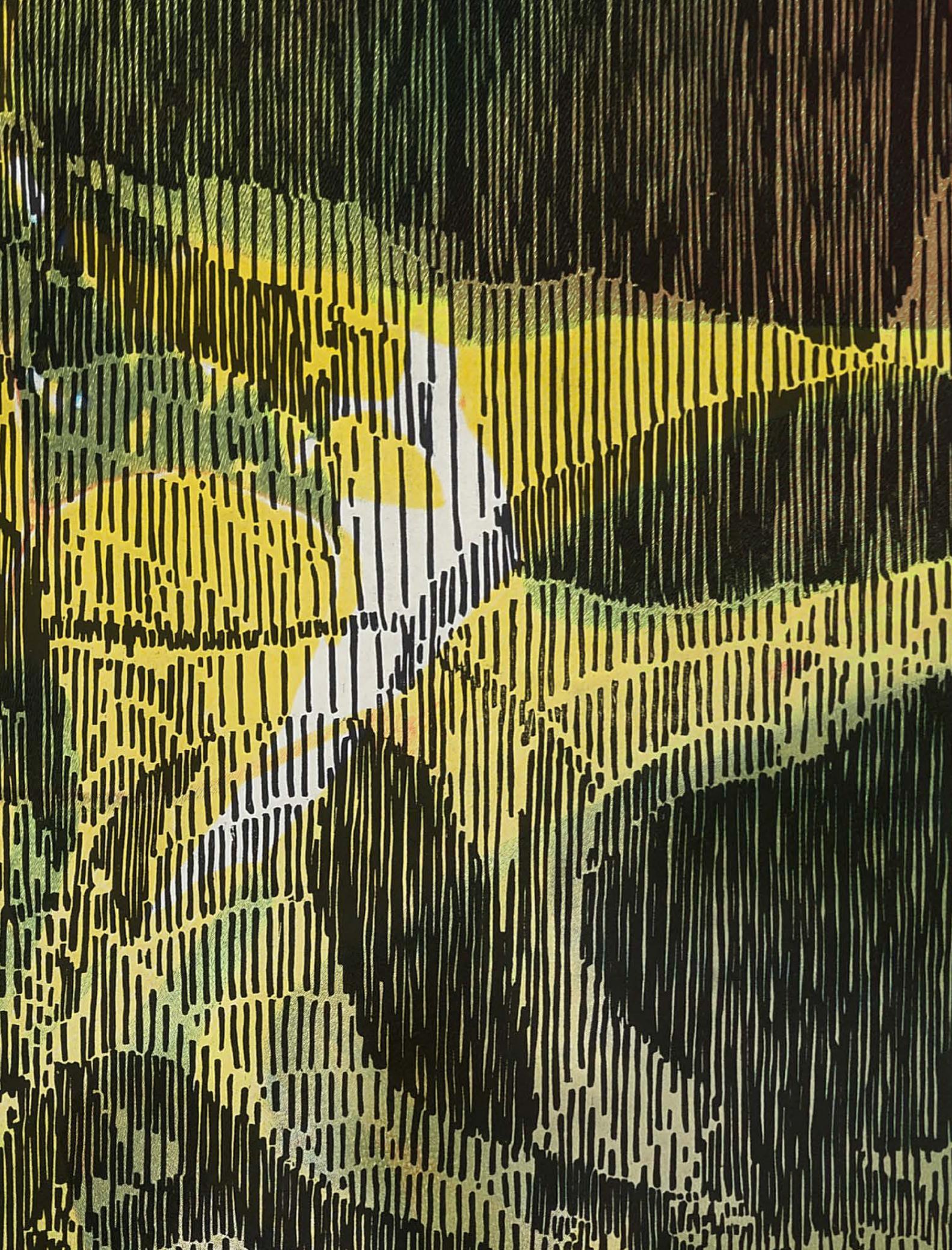
Dramatic sky by Jessezhou Uvaz via Unsplash.



Becoming with plants

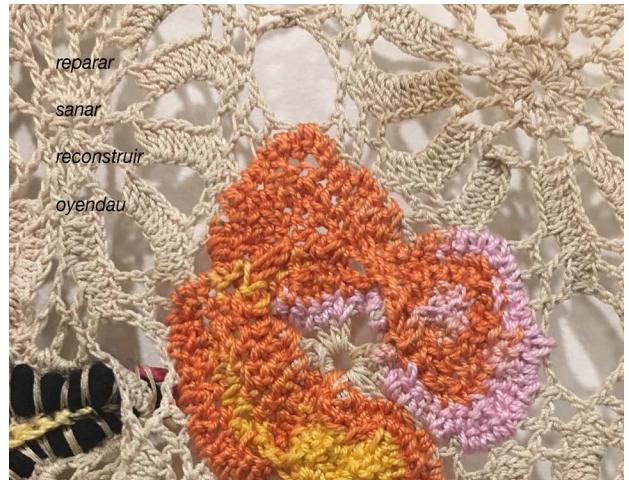
In this photo essay, visual artists Paula Do Prado and Brigitta Summers, and botanist Rosanne Quinnell reflect on the connection from plants to a deeper sense of self and place.

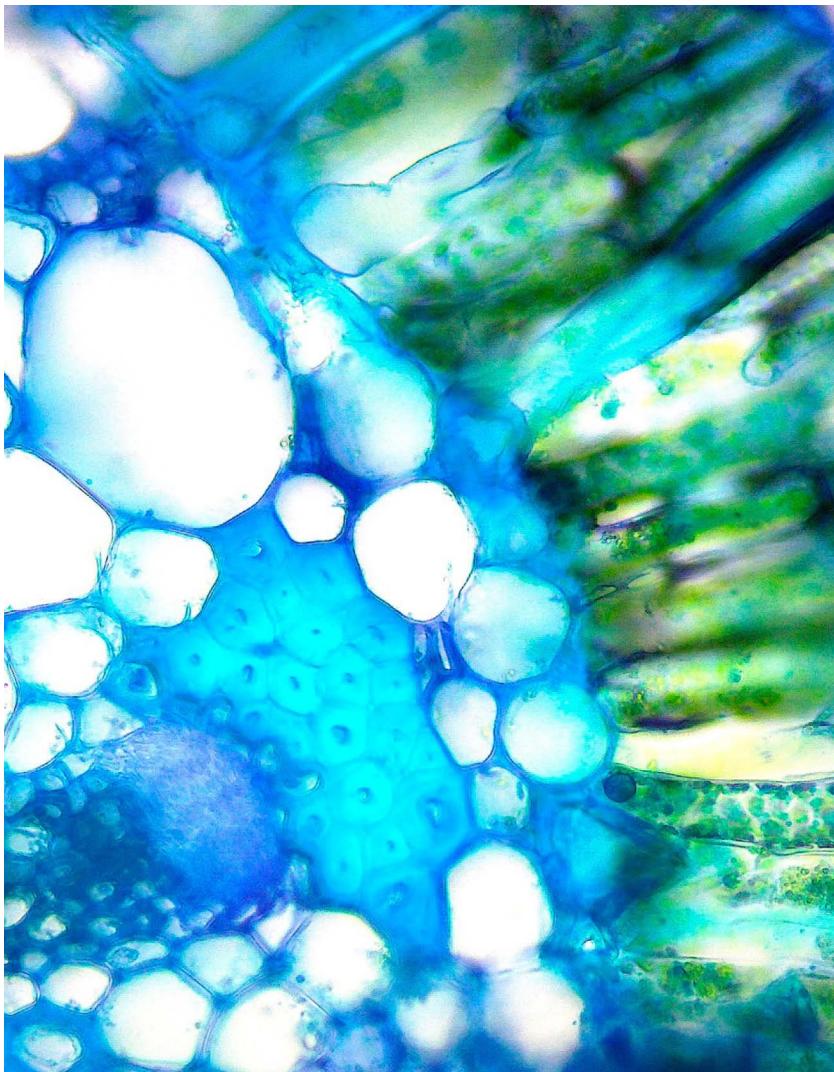
By Paula Do Prado, Sydney College of the Arts,
Associate Professor Rosanne Quinnell, School of Life
and Environmental Sciences, and Brigitta Summers,
Sydney College of the Arts, University of Sydney



Paula Do Prado

I practice listening with my feet. I imagine copious silver hair-like roots grow from underneath the soles of my feet. These spider web-like roots traverse glass and steel, wooden and concrete floors, they neatly pierce the asphalt seeking soil, seeking the touch of other roots. I am becoming with plants. I am attuning to the small noticing, turning in to see out, becoming very still, getting very quiet until my whole body is *sentipensando* feel-thinking-listening. I am grateful for the connections made through plants to self, place and people to think, feel and reflect with. I am remembering ways to be in relationship with place. I am reclaiming ancestral practices of introducing myself to place, to offer my grandparents' names, to state my purpose and asking for *licencia* – an ongoing process of checking in, of reviewing and listening, *permiso* – permission. Mending connections, weaving the intangible. I am remembering together with my son, who along with the plants, has become my teacher. I have made a commitment to return, to stay, to slow down, to feel into place and make myself known and accountable. I ground myself in conversation with the heath-swamp and wetlands on Gadigal Country where I live, fermenting and composting in the depths and at the edges.





Rosanne Quinnell

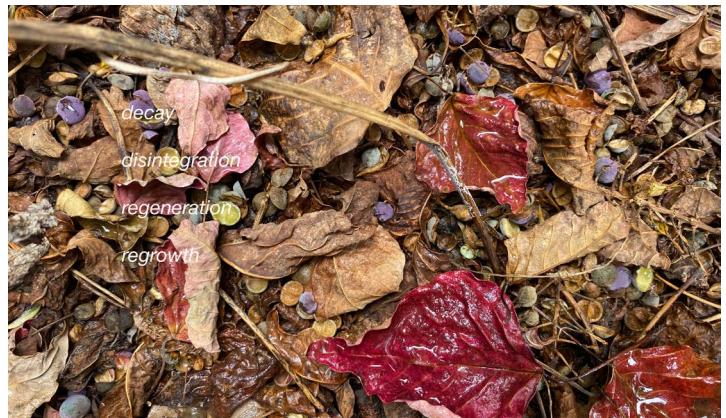
I have a need to bring a botanical friend with me to the Nature Feelz symposium. Secateurs at the ready, I snip some Brachychiton sprigs from the Quad then I continue to Science Road where the Gardenias are in bloom. They remind me of my mother. One of her many favourites. Distinctively fragrant and easily bruised. With last night's rain the petals browned at the edges. I stop. I breathe. My mother commanding my attention. Go slow. Go slow. I pick some Gardenia sprigs to hold with the Brachychiton. My mother with me. I continue on. Walking. Breathing. Holding. Grounded.

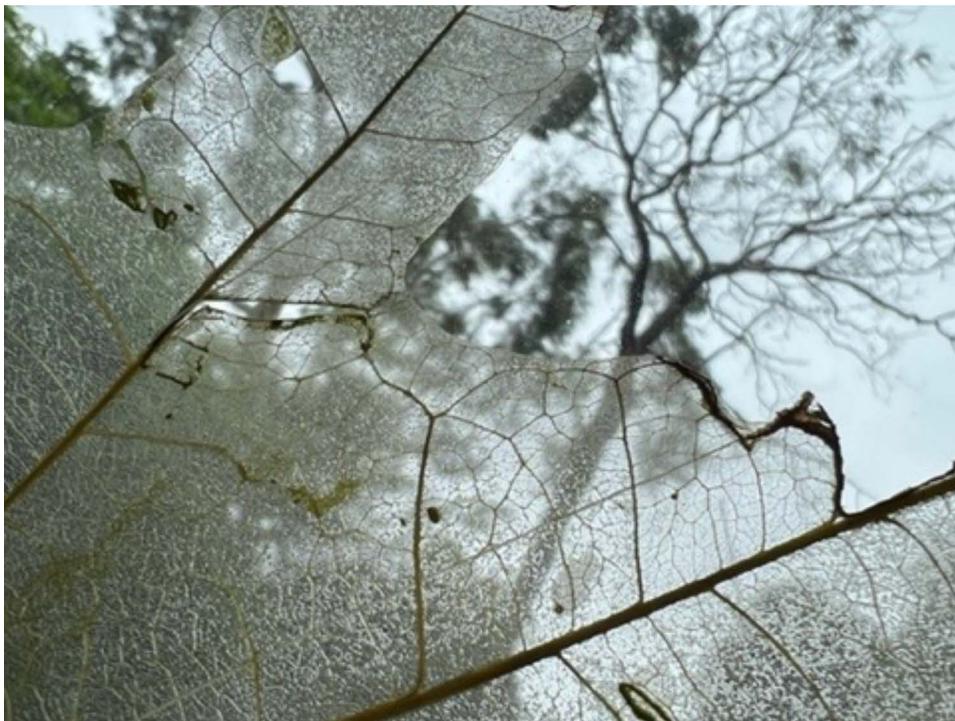
Our panel goes well. I share my reflections about my professional and personal relationship with the botanical world. I have spent close to 30 years looking at and learning about plants. Indulging a fascination with patterns. There is still so much I don't know.

Brigitta Summers

A screw bored into the living flesh of the tree, snagging my eye, ripping a small tear in the fabric of my thought. Two meanings of 'tree' veer towards each other, turning on the point of a screw. At the moment of its penetration, the tree as a living being twists into the tree as material. Later, as I carve my woodcut, I feel the way the grain of the wood curves up or down, the ways that the knots change the texture of the wood. I think of all the birch trees I have known (the wood is birch ply) and I sense the presence of the tree in the wood. The wood pushes back on my tool, my shoulders begin to ache and in a sudden reversal, I feel myself as material while the wood exerts itself as the tree it once was. The particularities of its growth and its species make themselves known. The distinction between being and material begins to collapse. Instead we are joined in the making. I think myself toward the tree.

I show Rosanne my woodcuts before the panel and she tells me they remind her of the internal structures of the tree. Without realising it, the tree has shown me how to draw it.

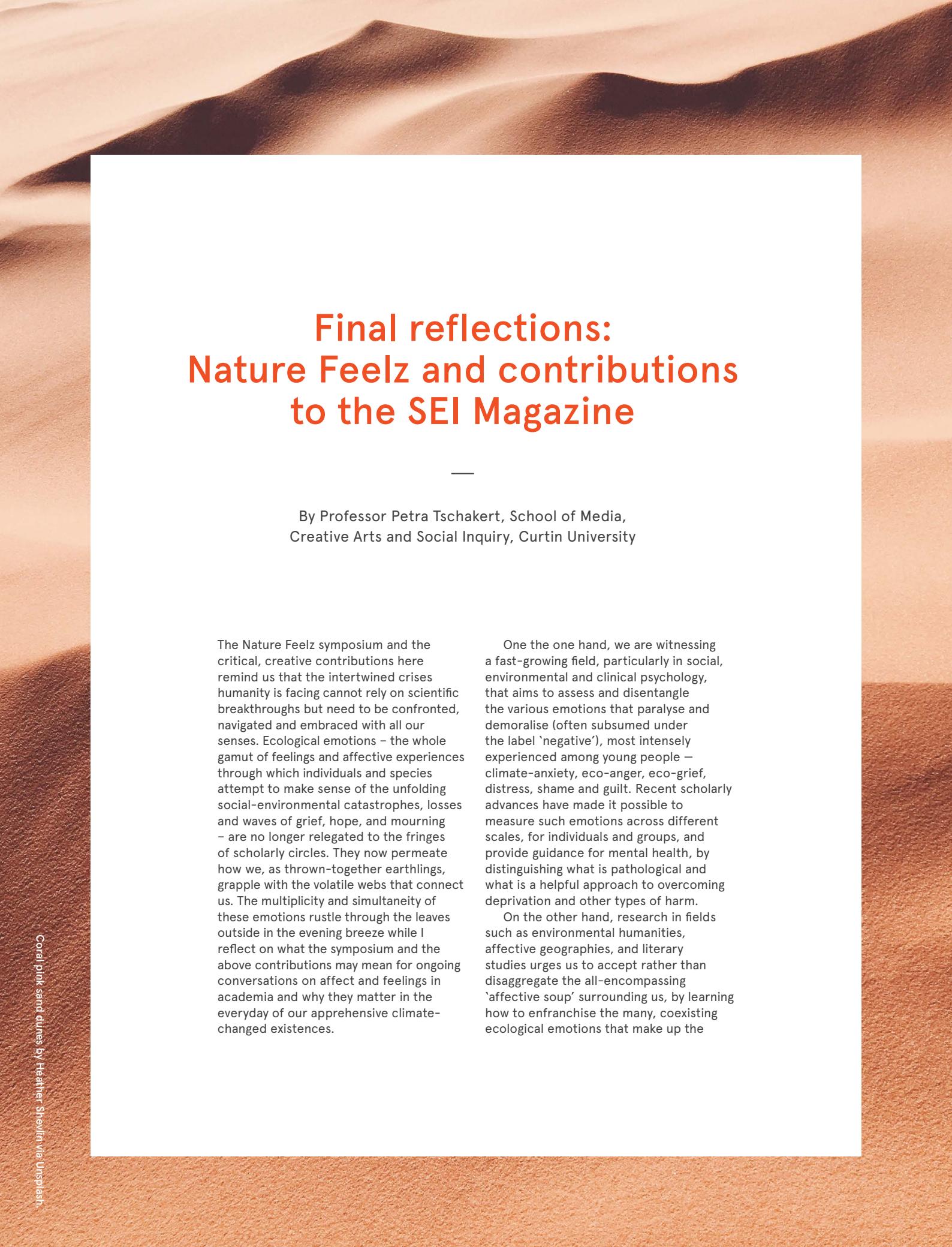




Paula Do Prado is a visual artist who works with tejidos/weavings as an active form of reclaiming, remembering and resisting. Her practice surfaces the intersections of her African Bantu-Kongo, Iberian and Charrúan ancestral heritage. She holds a BFA, First Class Honours (Textiles) and a MFA (Research) from the University of New South Wales Art & Design. In mid 2023 she will exhibit new work as part of "A Soft Touch" at Gallery 4A and she has been selected to exhibit at the 5th Tamworth Textile Triennial which will tour nationally 2023-25. She is currently a PhD candidate at Sydney College of the Arts, University of Sydney.

Rosanne Quinnell is a plant scientist in the School of Life and Environment at the University of Sydney where she leads the Transdisciplinary Research group. She is Deputy Director (Education portfolio) at the Sydney Environment Institute, Chair of the Living Lab initiative, and she is an active member of the Sydney Indigenous Research Network.

Brigitta Summers is a current Master of Fine Arts candidate at Sydney College of the Arts. Her research explores working with plants across a variety of practices (printmaking, artist books, bush care) as a means of transforming her relationship with the environment. Previously she has completed a Bachelor of Fine Arts at the National Art School, Sydney, and a Bachelor of Arts at the University of Oxford, UK.



Final reflections: Nature Feelz and contributions to the SEI Magazine

By Professor Petra Tschakert, School of Media,
Creative Arts and Social Inquiry, Curtin University

The Nature Feelz symposium and the critical, creative contributions here remind us that the intertwined crises humanity is facing cannot rely on scientific breakthroughs but need to be confronted, navigated and embraced with all our senses. Ecological emotions – the whole gamut of feelings and affective experiences through which individuals and species attempt to make sense of the unfolding social-environmental catastrophes, losses and waves of grief, hope, and mourning – are no longer relegated to the fringes of scholarly circles. They now permeate how we, as thrown-together earthlings, grapple with the volatile webs that connect us. The multiplicity and simultaneity of these emotions rustle through the leaves outside in the evening breeze while I reflect on what the symposium and the above contributions may mean for ongoing conversations on affect and feelings in academia and why they matter in the everyday of our apprehensive climate-changed existences.

On the one hand, we are witnessing a fast-growing field, particularly in social, environmental and clinical psychology, that aims to assess and disentangle the various emotions that paralyse and demoralise (often subsumed under the label ‘negative’), most intensely experienced among young people – climate-anxiety, eco-anger, eco-grief, distress, shame and guilt. Recent scholarly advances have made it possible to measure such emotions across different scales, for individuals and groups, and provide guidance for mental health, by distinguishing what is pathological and what is a helpful approach to overcoming deprivation and other types of harm.

On the other hand, research in fields such as environmental humanities, affective geographies, and literary studies urges us to accept rather than disaggregate the all-encompassing ‘affective soup’ surrounding us, by learning how to enfranchise the many, coexisting ecological emotions that make up the

murky spectrum of moody atmospheres. It is through the personal and shared navigating of these atmospheres that we may succeed in holding the tension between destruction and restoration, between hope and despair, and the past, present and future, in order to make difficult trade-offs between what to protect and what to let go of, in daily courageous acts of place making. Wouldn't it be phenomenal if we could visualise and make tangible, across the diverse skillsets of the arts, humanities and social sciences, the fluidity of our blending affective ambiences and their joined-up potential to bring about intergenerational justice and flourishing?

Eco-critical imaginaries too offer a promising window for how to create potent remedies for despair. Whether it is via tapping into the imaginative literature of romantic fantasy or contemporary climate and environmental fiction, the essence is quite similar. It is about eliciting the power of narratives, storytelling, play and experimentation, and a sense of wonder and awe through which we can hope to conjure new pathways for world building. Moreover, imaginaries embolden us to lean into these possible pathways, feeling them out, tasting and tickling them. They entice us to connect and subvert, and to probe the infinite constellations of more-than-human entanglements and belonging.

The many inspirational contributions here and from the symposium provide a vital stimulus for nurturing diverse ways of knowing and relational co-becoming, across different lifeworlds in which the richness of ecological emotions for human and non-humans is explored and validated. Perhaps the most fertile stage that allowed participants to revel in these possibilities was the pub evening featuring music, film, photography, poetry, and play, with some performances also reconstructed here. If 'emotional climate governance' appears too academic to trigger an affective response, try *My grief places are the same as my solace places, and [The ocean] is the heart* (poetry by Frances Grimshaw). Or, get ready to join the longfin eel, traversing water and land to reach spawning grounds near a Polynesian archipelago you barely knew existed, and sense through this journey of death and delight what interspecies care could feel like (multispecies drag performance by Laurie Form). Such moving art play provides the imaginative gear to encourage us to be together otherwise.

How to make such creative and provocative engagements with ecological emotions linger, beyond the short symposium duration and the compiled contributions here? They linger, and hence matter, because they afford both critical and animated lenses through which to appreciate diverse voices, embodied encounters, and struggles for more flourishing lives. Like no other academic conference or workshop I had ever attended, the Nature Feelz gathering stimulated our multi-sensory abilities to not only intellectually scrutinise the wobbly emotional amalgam (the 'affective soup') but actually sit with and navigate it. We found inspiration and comfort in the youth-led, intergenerational Open Dialogue for climate distress, the Good Grief Network, and exquisite examples of 'therapy outdoors', including manifestations of 'becoming with plants'.

Let's make no mistake though, such navigation is messy, rife with ambivalence and contradiction, and not for the faint-hearted. It requires a collective with whom to co-cultivate courage. What better example for such methodological journeying than the short tarot reading workshop offered? As a complete novice to tarot, I was ill equipped to foresee the possible nuances in interpreting the prompts. The question our (all-female) group formulated was: What do we need to know right now, as a collective, to re-connect with ourselves and our bodies? Several cards were signalling substantial challenges. Worse, when the final outcome card was revealed, anguish and numbness overcame me. It was the Eight of Swords, depicting a woman blindfolded with arms tied behind her back in front of eight swords planted in the ground and a puddle of water at her feet. The notion of feeling trapped, facing sheer insurmountable obstacles, was palpable, and as disturbing as most climate graphics I understand as an author of the IPCC (Intergovernmental Panel on Climate Change). Yet, the group took up the challenge and discussed a practical counter-narrative, pointing out available choices and agency to move forward.

This is precisely what is needed to face the concurrent crises – a willingness to welcome multiple narratives, alongside the myriad of ecological emotions we must learn to juggle. Nature Feelz provided us with some nifty tools to embrace this call for action, by allowing us to be galvanised and enchanted, together.

Petra Tschakert is a human-environment geographer in the School of Media, Creative Arts and Social Inquiry at Curtin University. Her work is on climate change adaptation, climate and mobility justice, resilience and power, intersecting inequalities, and global futures. Her current focus is on climate and multispecies justice, intangible loss and damage, everyday limits to adaptation, and energy humanities. She co-chaired Australia's 2022 National Strategy on Just Adaptation, led by the Australian Academy of Science and Future Earth Australia. She was Coordinating Lead Author with the Intergovernmental Panel on Climate Change (IPCC), for the Fifth Assessment Report (2014) and the Special Report on 1.5°C Global Warming (2018). Petra also leads the ARC Discovery research project 'Locating Loss from Climate Change in Everyday Places' in Western Australia. In 2020 and 2021, she was ranked by Stanford University in the top 1% of scientists worldwide.

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The red center, Northern Territory via Shutterstock.

SEI Magazine, 2022–23

The SEI magazine is produced by the Sydney Environment Institute, at the University of Sydney, on the Gadigal lands of the Eora Nation. We pay our deepest respects to Elders, caretakers and custodians past, present and emerging, here in Eora and beyond.

The magazine collates cross disciplinary responses to the critical environmental issues facing us today.

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