

*Living with the Anthropocene* is an illuminating deep-dive in this 'storm of our own making'. With such a diverse and expansive collection of voices, what makes this book stand out is its unity. Thinking about climate change can be lonely and devastating but here you can be assured of being held, not only in thrall, but in great company.

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*Iain McCalman*

Scientists originated the term and concept of the Anthropocene. But this work takes a much deeper dive into what the Anthropocene really means for us humans now and into the future, and – importantly – what the Anthropocene means for the rest of life with which we share this planet.

*Will Steffen*

# LIVING WITH THE ANTHROPOCENE

## LOVE, LOSS AND HOPE IN THE FACE OF ENVIRONMENTAL CRISIS

EDITED BY  
CAMERON MUIR,  
KIRSTEN WEHNER AND  
JENNY NEWELL



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## SIGNS AND WONDERS OF A NEW AGE

*Delia Falconer*

I have lived near the harbour in eastern Sydney for twenty years and, because I walk, I have become an observer of local conditions. In autumn I watch for fish fry in the water and the swifts that circle like tiny warplanes above the navy dockyard. In winter, great gangs of corellas flock around the plane trees in Rushcutters Bay Park, while in summer the koels call with a grinding yearning. There have been surprises over the years: a fairy penguin off the end of Darling Point, or the metre-wide stingray gliding, on the high tide, up the middle of the Rushcutters Creek canal. But mostly I am looking for familiar creatures: the microbats that flit at dusk above the water near the stairs to the small beach; or the flying foxes in the Moreton Bay fig outside our apartment, though there are no longer enough of them to keep us awake with their squabbling at night.

One of my walks takes me around Mrs Macquarie's Chair in the Domain, through Woolloomooloo Bay. From the old boardwalk next to the marina, I always keep an eye out for the large mullet that nose around the floating moorings.

One day, in 2018, when I stopped to look there was nothing in

the deep green water: not a mullet, nor even one of the usually ubiquitous smooth toadfish with fins like propellers. Once I would have put this down to the relative absence of fish in Sydney Harbour in winter, but this time it felt different: I found myself wondering if there were no longer any fish left to see. What if they had disappeared, like the sparrows that were such a common sight when I was a child, or the greengrocer cicadas that we used to catch in the school playground? I had been ticking off checklists of animals on my walks, I realised, to counter a growing sense of loss.

The knowledge that human activity was driving the Earth's creatures and systems to – or beyond – breaking point first struck me with full force in 2016, when I was in Buenos Aires. I went online to news that a bleaching event had killed 30 per cent of the Great Barrier Reef: a 2000-kilometre-long organism large enough to be seen from outer space. That I was on the other side of the world in a city that was itself experiencing unseasonal autumn humidity, which the locals were ascribing to the loss of rainforest in the country's north, made the sense of end times more urgent. The figures were already grim. In 2014, the World Wildlife Fund released its *Living Planet Report*, which concluded that human activity had killed off 52 per cent of the world's wildlife over the previous forty years.

That afternoon in Woolloomooloo, I realised the missing fish had become signs of catastrophic absence. Everything is carrying an awful symbolic freight. 'Every bird I see these days, every bee', my children's godmother says, 'I wonder if it's the last.' 'Are wombats endangered? Are echidnas?' asks my son, who has recently learned about the plight of koalas, as we drive through rainforest to our Airbnb tucked into the base of the Barren Grounds escarpment south of Sydney.

The global catastrophes underway are dizzying. Each day brings news of the ongoing crises we are starting to recognise under the umbrella of the Anthropocene, our new age of human-made change that has pushed us out of the stable 12 000-year Holocene.

Out-of-control fires in the Amazon; warming sea currents; record high summer temperatures in both hemispheres, leading to ice caps melting at a rate far faster than environmental modelling had anticipated; it's hard to grasp how quickly things are turning. This means that it is almost impossible now to look at the smallest details without a sense of deep unease.



AT SCHOOL I LEARNED HOW ROMAN PRIESTS AND OFFICIALS would look for omens of the future. Haruspices would examine the entrails of animals, augurs the flight patterns and songs of birds. In the 1980s, it was easy to feel a sense of smug distance from these ancient practitioners of prophecy; but now I notice that we are scrutinising the same things, through science, but also in our conversations. The great difference is that now we are trying to read not only the future but also the past as it intrudes more and more into our present. Instead of trying to divine the will of the gods from these same signs, we are trying to determine our own responsibility as a species.

Surely some of the most iconic images of the last decade have been Chris Jordan's photographs of dead albatross chicks on a beach in Midway Atoll National Wildlife Refuge. The atoll lies in the Hawaiian Archipelago, in the North Pacific Ocean, more than 2000 kilometres from the nearest continent, but in these pictures, which went viral, the birds' rib cages have collapsed to reveal, within the soft shapes of decomposing feather and bone, stomach cavities filled with dozens of bright pen lids, buttons and bottle tops. Scientists worldwide are studying seabirds' stomachs to assess the impact of decades of plastic pollution on their populations. In a 2018 issue of *Griffith Review*, Cameron Muir described watching scientists pump the stomachs of shearwater chicks emerging from their burrows for the first time on remote Lord Howe Island. The plastic objects the

team discovered – as many as 276 pieces per bird – confirmed the catastrophic spread of the material through the oceans, with some studies suggesting 90 per cent of seabirds have now ingested some sort of plastic. Muir records the audible crunching of the belly of a young chick that was euthanised.

More recently, it is whale stomachs that have been going viral. Forensic videos show scientists pulling plastic, piece by piece, from these creatures' vast internal organs. One necropsy, filmed at night, shows a 4.7-metre-long Cuvier's beaked whale, found dead of starvation in the Philippines. A man reaches into the young animal's insides to unfurl large pieces of soft plastic, which look like obscene intestinal tissue in the artificial light. The final tally will be 40 kilos of plastic, including sixteen rice sacks, plastic bags, snack bags and tangles of nylon rope: one of the worst poisoning cases scientists in the area had seen. These autopsies are themselves grim animations of the figures issued by UNESCO, which estimates that plastic pollution is killing 100 000 marine mammals every year.

Then there are the waves of multiple animal deaths – sudden die-offs of large numbers of living creatures. In spite of their abbreviation to the businesslike 'MEE', these mass extinction events retain the quality of epic portent. Here in Australia, an extreme heatwave in December 2018 killed an estimated 23 000 spectacled flying foxes in far north Queensland – almost one-third of this species on this continent – as they are unable to regulate their body temperature once the external temperature exceeds 40°C. Colony die-offs around the country are ongoing. That same summer up to one million native fish, including bream, silver perch and decades-old Murray cod, perished in the lower Darling River. Footage of NSW MP Jeremy Buckingham gagging and vomiting on camera as he held the rotting corpse of a cod from the mass floating in the Menindee weir pool seemed like a moment of visceral augury. An abnormal rise in water temperature is now also mooted as the cause of the 2013 die-off of hundreds of

millions of sea stars along the west coast of North America from Alaska to Mexico, making the starfish vulnerable to a bacterial infection that destroys their limbs and wastes their bodies until they liquefy. This is the largest epidemic ever observed in wild marine animals.

For the ancients, changes of animal behaviour were also signs of the gods' will. Changes in the flight patterns of birds, or in their songs or feeding habits, or any other unusual activity such as a wolf, horse or dog in an unusual location, all required interpretation. Today, we are seeing such changes on a global scale. In 2017, a tally of 4000 species from around the world showed that roughly half were on the move in response to changing climate conditions. Others appear to be simply – and confoundingly – disappearing. In 2018, newspapers began reporting an apparent 'insect apocalypse', after German entomologists described a drop in biomass in their nets of 75 per cent over twenty-seven years of collecting. This confirmed an anecdotal sense of decline that had already been broached by writers like Michael McCarthy. In his 2016 book, *The Moth Snowstorm*, he described how many of the insects whose presence we had taken for granted, even if this was as brutally simple as registering the accumulation of moths on the car windscreen on childhood drives, were no longer a familiar part of our daily lives.

While it makes intuitive sense that these disappearances and deaths must be signs of drastic damage caused by human activity, direct links can prove elusive. For example, in 2018, in the northern hemisphere spring – calving season – an estimated 200 000 critically endangered saiga antelope were found dead in Kazakhstan. Many had stood grazing normally until a moment before they fell; as if, one scientist reported, 'a switch had been turned on'. This single event killed 60 per cent of the total global saiga population. It was only after performing post-mortems on thirty-two animals that scientists were able to conclude that the cause was the bacterium *Pasteurella multocida*: a recent 37°C heatwave and 80 per cent humidity had caused

it to pass from the antelopes' tonsils, where it resided harmlessly, into their bloodstream, leading to haemorrhagic septicaemia. Here in Australia, a panel from the Australian Academy of Science would subsequently attribute the Darling River fish kills to a combination of drought and over-extraction by those managing the Murray-Darling river system. No action has yet been taken to put water back into the system. Meanwhile, science proceeds with necessary caution. Some scientists have expressed scepticism about catastrophic insect demise in the future, citing a lack of long-term data.

When scientists do confirm your suspicions, and even express uncharacteristic shock, it feels as if the earth has suddenly dropped away beneath your feet. In Australia, researchers have observed a fall in the bogong moth population that they describe as 'astonishing'. Each spring, an estimated two billion bogong moths used to make their 1000-kilometre migration from grasslands in Queensland and northern New South Wales to the alpine region in the country's south-east, where they would aestivate in the mountains' cracks and boulders. It was only as recently as 2018 that scientists worked out that they were using the Earth's magnetic field to navigate, the only insects in the world to do so. In 2019, when they searched the moths' usual summer hiding places, researchers could only count several individuals, or none. 'They haven't just declined. They've gone', ecologist Dr Ken Green told the *Guardian*. 'We have done mountains from down to the Victorian border all the way to Canberra. We have checked every cave we know.'

The cognitive dissonance this disappearance produces is profound, even for those of us who have lived for decades in cities, only registering the edge of the migration in the influx of lost moths through open windows or swarming around oval floodlights on hot nights. The last great influx of bogongs into Sydney I can remember was in 2007, when I walked back from lunch with my cousin in the city on an October afternoon. Dark clusters of moths crowded around the

overhanging granite entryways of the buildings near Circular Quay, while those ousted from their cool resting places fluttered helplessly on the hot footpaths. When I moved back to Sydney from Melbourne in 2001, the bogongs were so ubiquitous that as I prepared to bite into my toasted focaccia at a hole-in-the-wall café in Potts Point, I noticed just in time the antennae of an insect that had self-immolated in the melted cheese. These moments feel like a mere eyeblink ago and at the same time irretrievable. These days, instead of living with a sense of futurity, I find that I am looking at my surroundings more and more through a forensic lens. When I do dare to look forward, these phenomena point to a future void that I realise is already here. It is the same story with Christmas beetles, a feature of past hot summers. I can't remember the last time I caught one ping-ponging around my study, or felt its tickling strength in my cupped hands.



THESE ARE TRULY STRANGE TIMES BECAUSE, AT THE SAME moment that the Earth is throwing up signs of distress, it is also giving birth to phenomena of spectacular and haunting strangeness. On the one hand, my Facebook and Twitter feeds are studded with my friends' fear and grief about the environment. On the other, they are filled with a stream of postings in which beautiful and uncanny phenomena follow one after the other, imbued with a glamour that is weirdly incandescent. These 'wonders' are less obviously urgent but just as pernicious. Atomised, and quasi-magical, they turn a dying world into a modern cabinet of curiosities, or a suite of special effects.

The most miraculous of these modern wonders, surely, are the images of long-extinct animals that are emerging after tens of thousands of years from melting permafrost in the arctic north. In 2018, goldminers in Canada's Yukon unearthed a mummified prehistoric wolf cub, its fur, skin and muscles perfectly preserved. Eight weeks

old at the time of its death 50 000 years ago, when the forest was empty tundra, the cub is the only one of its kind so far to appear. That same year, from the Batagaika Crater in Yakutia, Siberia, a Pleistocene-era *Lenskaya*, or Lena horse, two weeks old, emerged after 30 000 to 40 000 years in the permafrost; this was not long after a month-old cave lion, eyes not yet open, head resting on its paw, also turned up in Yakutia, on the banks of the Tirekhtykh River. Posted and re-posted, these images too are forensic – and yet, at the same time, shot in perfectly lit close-up they are also eerily compelling. ‘Little hooves’, ‘Amazing detail’, enthuses one site showcasing these oddly intimate photographs.

Throughout the northern hemisphere summer of 2018, the world’s fourth-hottest year on record, other ancient things made themselves known. Severe drought in Europe, in which rainfall in some places was 3 per cent of the usual quota, caused rivers in Germany to disgorge unexploded bombs from the Second World War. Archaeologists in Denmark recovered thousands of objects going back as far as 4000 BCE from the scree-covered edges of Oppland’s melting glaciers, while hunters, hikers and children stumbled on 1500-year-old Viking swords. In 2019, the revelations continued. That August, the Twitter account ‘Secrets of the Ice’, run by scientists based in Norway, posted new finds: a 1500-year-old arrow and a medieval packhorse, which died wearing custom snowshoes.

In the United Kingdom, over the 2018 summer, the footprints of vanished Roman mansions, Victorian houses, airfields and prehistoric settlements were also manifesting in grassed fields and parks. Straw-yellow, or lush emerald green on lighter green, these weird patterns were ‘parch marks’: ghostly scars of human activity that revealed themselves as the land dried and grasses died off. In one haunting image, taken above farmland in Eynsham, Oxfordshire, a ‘harvest’ of darkly outlined Neolithic barrow graves and paths and walls sprawls across two vast fields, the inscrutable ceremonial

structures of a lost society dwarfing a modern farmhouse tucked into its tiny patch of garden. The dark green circles, lines and smooth-edged squares make the yellowing fields look disconcertingly like the pages of Leonardo da Vinci’s notebooks, as if a giant hand has made busy calculations across the Earth itself.

Other parts of the Earth also seemed to be trying to communicate with us in some way. In the Batagaika Crater – a ‘megaslump’ in the Siberian wilderness a kilometre long and almost 800 metres wide – the sound of running water and chunks of frozen ice thumping down the cliffs from the unstable rim announces the rapid melting of ground frozen for thousands of years. ‘As you stand inside the slump on soft piles of soil ...’, one ecologist told the *Siberian Times*, ‘you hear it “talking to you”, with the cracking sound of ice and a non-stop monotonous gurgling of little springs and rivers of water.’ Recently, the United Nations Framework Convention on Climate Change (UNFCCC) has been backing a project in which musicians mix compositions from recordings made by scientists from the Alfred Wegener Institute of melting icebergs in the Antarctic Weddell Sea, to raise consciousness of global warming. These sounds are ‘excruciating’, like ‘animals in pain’, according to UNFCCC spokesman Nick Nuttall. Meanwhile scientists from California’s Scripps Institution of Oceanography and the Polish Academy of Sciences in Warsaw have been using underwater recordings of air bubbles continuously exploding in the water – ‘like rain hitting the surface of the lake’ – to try to predict the speed at which glaciers are melting. The higher the melt rate, the more intense the noise. ‘These tiny air bubbles are singing songs’, said the study’s lead author Oskar Glowacki, ‘and these songs are the songs of the changing climate.’ In their disturbing power, these descriptions remind me of Edgar Allan Poe’s story ‘A Descent into the Maelstrom’, in which a sailor recounts being sucked into a mighty whirlpool; he escapes death, but his hair turns white from his exposure to its ‘general burst of terrific grandeur’.

Not so long ago, it would have been possible to dismiss these observations as instances of 'the uncanny', defined by Sigmund Freud in his 1919 essay of the same name as a dread and creeping horror that occurs when the hidden or secret seems to become visible and something once very familiar acquires an eerie sensation of animation. This experience, Freud wrote, 'forces upon us the idea of something fateful and inescapable when otherwise we would have spoken of "chance" only'. For Freud, the uncanny was not 'real' but rather a result of not having fully banished 'animism' from our modern souls. A belief in the return of the dead or the animation of the inanimate was also related to infantile impulses towards wish fulfilment that adults should normally overcome.

Yet now, French philosopher Bruno Latour argues, the Earth really *is* speaking. The Earth is no longer the distant, objective foundation to our lives. Because it is now so entangled with us, it is unstable and 'trembling'. Once we begin to see that our human activity is present everywhere, Latour writes, the world becomes 'an active, local, limited, sensitive, fragile, quaking, and easily tickled envelope'.

If we accept Latour's claim that the Earth is in fact addressing us – that the uncanny is real – then the apparent 'wonders' in our feeds become horrors. Take Russian deep-sea fisherman Roman Fedortsov's popular Twitter account, in which he posts photographs of bizarre bycatch, which have been trawled up from the mesopelagic or 'twilight' zone of the Norwegian and Barents seas. We have only explored less than 0.05 per cent of this zone, whose creatures scientists believe may 'pump' carbon from the surface to the seabed, but fishing nations are exploiting its immense masses of pelagic shrimp as feed for farm-raised fish. The ratfish and ghost sharks Fedortsov photographs are 'relics' of life that preceded human existence. As we penetrate further into a dying ocean, and the conditions of their existence fall away, they appear now at their most vivid and strange. One of the reasons that these fish are so spectacularly 'ugly', disturbingly shapeless with faces

contorted into almost human grimaces, is because they are designed to live in high-pressure environments. Their fat cells 'melt' as they are hauled to the surface. What we are seeing is a ghastly distorting mirror of our own human activities, just as the Batagaika Crater is the ghastly spectre of our dependence on fossil fuels. Those fossil fuels are themselves the ghosts of 650-million-year-old forests, which have returned to life in the form of global heating that is splitting the permafrost and churning methane into the atmosphere to heat it further. Yet the reason Fedortsov is able to post these images of distorted fish goes unremarked on the numerous aggregator sites and newspaper websites which re-post these images, in turn, in sections dedicated to the weird or curious. I have not been able to find any that note that deep-sea trawling, which dates from the 1980s, is listed by the World Wildlife Fund as one of the three main threats to deep-sea biodiversity. Instead these fish appear as objects of idle entertainment, even amusement. 'Something about this reminds us of *The Shape of Water*', jokes an anonymous writer on a CBS photo gallery in response to a 'crazy-looking fish' in Fedortsov's feed. 'This looks like my sister', an Instagram user says of another.

Messages written by human hands also appeared in the unprecedented heat of the 2018 northern hemisphere summer, in the form of a dozen 'hunger stones', which emerged from the drought-stricken Elbe River, near Decin, in the Czech Republic. Recording low water levels caused by 'megadroughts' dating back as far as 1417, their inscriptions, in German, were intended to act as warning signs for future generations. '*Wenn du mich siehst, dann wiene*', one from 1616 read: 'If you see me, weep'. 'If you see me, weep', seems like pertinent advice in the face of the many emerging signs of the Anthropocene: this new geological era in which human activity has become the dominant influence on climate and species loss is occurring, fifty years into the 'great acceleration', at a thousand times the normal background rate. These days, the infantile impulse towards wish

fulfilment that Freud described seems to lie not in our experience of the uncanny, but in our determination to dismiss the stories of ruin these phenomena express.

Yet we continue to refuse to see these phenomena, isolated in their own strangeness and stripped of their complexity, as signals of distress. In the *New Yorker's* piece on the English parch marks, after a paragraph paying lip service to the weird awfulness of the unusual hot weather, the writer quickly shifted his attention to the bonanza these marks represented for aerial archaeologists. 'It's a bit like kids in a candy shop', one said, as the author went on to speak to other excited beneficiaries of these 'freak conditions'. Faced with evidence of a dying river system, the *Daily Mail* chose instead to mock Jeremy Buckingham's vomiting, triggered by the stench of rotting fish, as a 'bizarre moment'. Having 'already amassed 2000 views' this story was consigned to the newspaper's bank of other bizarre vomiting stories, alongside the father who threw up eight times a day and the regurgitating vultures that overran a couple's Florida holiday home.

Even when these 'wonders' appear in a more critical context, they still retain their bewitching glamour. 'Secrets of the Ice' retweets tweets about global heating, but it is its latest excited 'finds', photographed in close-up, that are constantly retweeted. Another account on Twitter, 'Lego Lost at Sea', has since 2014 been tracking the five million pieces of Lego lost overboard, when a giant wave washed sixty-two shipping containers off the *Tokio Express* in 1997, as they turn up on the beaches of Cornwall. Although it also reports on plastic pollution, the account's images of plastic sea creatures and mythical beasts flattened into collages by the camera are so beautiful and addictive that, as they are re-posted, it is easy to forget that they represent our literal haunting by plastic pollution, which is predicted to outnumber fish in the oceans by 2050. 'Lego Lost at Sea' finds have now become collectors' items, especially the octopuses and dragons, which are often photographed posed against a natural landscape.

Scattered, gilded with enchantment or dismissed as curiosities, these wonders appear to us as numbing diversions, sapped of their prophetic agency as signs. And yet, both signs and wonders are trying to tell us, with a terrible animation, that we can no longer depend on the stable patterns of the Holocene. We are now seeing 'once in a hundred year' events almost daily, along with news of irrevocable loss. Most recently, Iceland has placed a plaque to mark the loss of the iconic Ok (Okjökull) glacier as arctic ice melts at much faster than predicted rates and prehistoric forest burns. They are telling us that a door is closing, that the past is returning to engulf our future, like Edgar Allan Poe's maelstrom. We should be attending to their warning with rage and urgency. In 2018, the Intergovernmental Panel on Climate Change report gave us a scant twelve years to limit global heating to levels which still threatened frighteningly unpredictable effects. More recently, some scientists have revised down the critical window for action to the next eighteen months.



AND STILL – IT'S HARD TO KNOW QUITE HOW TO FEEL. LIFE IS often, in harbourside Sydney at least, still very beautiful. When I walk with my seven-year-old twins through the park on a winter evening so balmy that it is full of families in light tops and shorts, I wonder if this is a lucky warm weather system – and certainly, the mood in the park is joyful – although my heart knows it is a sign of global heating. 'Is it true that everyone in the world is going to die soon?' my daughter asks me on the way to school. My heart stops. 'Everything dies eventually', I tell her – 'but hopefully not soon.' For the time being that's enough of an answer and she and her brother race ahead, past basking cats and terraces with brightly painted doors, in the unseasonably humid autumn morning.

Time itself seems to have become unreal. On the one hand, I fill

in my work plan at university. I book our accommodation for Christmas holidays on the south coast. I talk with my children about their plans for what they will do when they grow up – although I do this with a strange detachment, with no genuine sense that any of the familiar pathways will lie ahead of them in even ten years. Instead of awe or even rage, most often I feel pervasive dread. I have lost my belief in futurity. I recall Brian Dillon, in *Essayism*: ‘Depression, among other things, has always felt to me like a drying up of one’s reservoir of symbols and figures for a continued and perhaps even improved life’.

In an essay on his family history for the *New Yorker*, Nathan Heller writes that, long before the founding of Rome, the Etruscans measured time by something called a *saeculum*. ‘A saeculum spanned from a given moment until the last people who lived through that moment had died.’ What moment will my children date time from? From the time they went to their first climate change school strike? From the time orangutans or koalas are declared extinct? From the first water wars? Or from a time when it was still possible – just – to imagine a future anything like the past?

On another walk, along parkland reclaimed from the sea at the beginning of last century, grass and soil laid down over old marsh and sand, it suddenly strikes me that if, or more likely when, the water rises – and these timelines and heights are being redrawn drastically as I write – not only will it rise up the hill to our apartment but every sandy beach and every tidal swamp with all their unique life will also go under the water. I find my mind playing with other what ifs. Once the glaciers melt away – once the insects die off – once our coral systems collapse – how can anything survive? Then I return to a present in which to think about catastrophe seems unhinged. ‘I have absolutely no belief that we’re going to be threatened by rising water or warming anytime soon’, a father at my children’s school tells me. ‘I think things are going to be pretty much the same, forty or fifty years

in the future, where we’ll be fretting over the same small worries.’ And yet. ‘Have you started to feel guilty about having children yet?’ a colleague at work asks me in the corridor. ‘Yes’, I say. But we keep our voices to hushed whispers beneath the fluorescent lights.

Although we are surrounded by clear signals of distress, exact cause and effect are difficult to pinpoint: the chain of events bringing us to this point is complex and hazy, and overwhelming. Sometimes I think all I can do is to just record these signs. Sometimes I think it is no bad thing to be more like those ancients in their alertness, their willingness to link the small to the enormous; to return to the concept of hubris.

One night not long ago, my children’s godmother is reading to my daughter from a book about elements, in which tiny samples of gold leaf and zirconium are folded into envelopes between the pages. Do you know, my friend says to my daughter, that we are all made out of stars? The universe was originally only hydrogen and helium, she explains. Everything else that makes up life on Earth – the carbon, nitrogen, oxygen, and all the heavier elements – was created over billions of years in the cores of stars, which exploded, sending their dust through interstellar space. And so almost every atom in our body, every unique animal and bird and plant on Earth, is made of stardust. From the kitchen, over my daughter’s head, I hold her gaze for a moment, and feel the tears start. ‘I know’, her eyes say back.

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## SEEKING VANTAGE POINTS

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## COLOURS PURPLE

Ashley Hay

### Brisbane, Queensland

There's a tibouchina tree on the street that leads from my son's school to the railway station. I pass it once or twice a week, the brilliant flare of its colour pressing hard against my eyes when it's in bloom. *Tibouchina lepidota*: its flowers blaze with one of the least subtle purples in the world. There was a tibouchina tree at my grandparents' house in Thirroul on the NSW south coast; it grew at the bottom of their front stairs. I can't remember now if those stairs were wooden or if they were concrete. What I can remember is the colour of the flowers on that tree; my grandmother would pluck two petals and stick one on each lens of her glasses, transforming her vision, and mine, into a crazy, psychedelic sight.

Whenever I see that brilliant purple, I think of my grandmother. I think of altered vision. I think of something that made me laugh when I was three or four, and that now makes me smile.

