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27 The Life/Death of Plants: An Interview

Marie Sierra and Prue Gibson

MS: If you were a plant, where in the world would you be?

PG: While I suspect I am kin to the banksia tree, I also know which plant I would like to be. After all, this tree is the banksia's cousin, and we all need each other to thrive. It's the Xanthorrhoea, a grass tree: the cadi tree of Cadigal land. They are warrior trees. Sturdy survivors. Sometimes it takes twenty years for the cadi tree's thick stem, the caudex, to emerge. Like a voice worth listening to, it takes time for the cadi to show herself. Rough, thickened, and coarse, the cadi's caudex is sturdy and immovable. Not a trunk, but a substantial, woody base. Not even a devastating bushfire could overwhelm the cadi trees. I know this for a fact.

In October 2020, a runaway bushfire at Sydney's North Head ravaged a site of endangered Eastern Suburbs Banksia Scrub, which was dense with banksias, cadi trees, coastal wattle and tea trees, leptospermum, prickly moses, and hardenbergia. The fire was the result of a disastrous hazard reduction, gone very wrong. 62 hectares were ravaged. When I visited shortly afterwards (I snuck in), the only plants that were green were the Xanthorrhoea trees. Some blackened banksias and tea trees showed signs of survival, but the scene was brutal, devastating.

The scrub has slowly started to recover since 2020, but the tea trees are growing too quickly and are crowding out the lower storeys. The view from the remnant scrub at North Head is an epic vista that inclines towards South Head, across the mouth of the harbour. It's impossible not to think of early days of invasive settlement when you have this panorama. It's impossible not to remember what Brenden Kerin from Redfern's Metro Land Council told me about the ESBS scrub—that prior to colonial times, there were regular cultural burns of the scrub to keep the low grasses down and the lower branches of the trees clear. Before settlement, the tea trees worked in synergy with the other trees and

didn't grow too big. Non-Indigenous human impact has messed up the natural balance of the ecology.

That day I visited the scrub after the fires, my first instinct was to weep. As I walked across the soot, peppered with burnt phones and bottles (kids must have had quiet drinking sessions under cover of the bush) and hurdled the burnt logs, I felt the ash stick to my nostrils. There was still heat in the ground. I bent carefully to walk beneath blackened boughs and unstable burnt tree branches, and tiptoed across the dirty, aeolian, sandy soil. That was when I saw the dots of green in the mid-distance. Dozens of cadi trees that weren't black. The scene was either black or grey, save these trees.

The cadi trees, with their dark, thick stems and their waterfalls of sharp green foliage, welcome controlled fire and smoke. Their flowers are triggered by fire; this is called serotiny. Many of the Eastern Suburbs Banksia Scrub plants also welcome fire, such as the banksia whose cone follicles release seeds after fire. But… not that much fire. Not annihilating fire.

The Xanthorrhoea, the grass tree, is actually not a grass nor a tree. It's related to the lily species. As is often the case, our western English language is inaccurate and/or inadequate to match the complexity and sophistication of plants. Instead, this plant is the cadi. Proud, strong. Survivor. If I were a plant, I would like to have the strength of the cadi.

MS: What advice would you have for a fellow grass tree that has been languishing in a neighbour's front yard in a pot for some months while they are renovating? I think it may be asking to be rescued. Here is a photo of it. How did it come to this, and what does that say about our relationship to plants?

PG: There is a lot of shame associated with accidentally killing plants. It's easy to murder vegetal life. Too much water, too little; too much sun, too little. Not the right kind of soil, burned by too much manure. However, is there something about plant abandonment that is much worse? Humans abandon pets at alarming rates too. Is pet abandonment worse than plant-abandoning? Are cut flowers okay, but harvesting from the bush (crown land or national parks) is unethical?

The problem with the photo you have given me, Marie, is that it's hard to see the context. The ethics of this particular grass tree is difficult to evaluate, because I can't quite make out the details. The photo shows red- and yellow-topped garbage bins in the background and an autumnal, red-leaved tree in the

foreground. In between are two plastic black pots. One looks like a neglected jade tree, and the other is the grass tree you mention. It has no green foliage, but only the wide caudex base—a caudex that could be a decade old, based on its breadth. Where the foliage should be splaying out at the top, there seem to be wounds. Did the foliage get knocked off? Was this grass tree the subject of a previous burn? The caudex looks very blackened, too.

I remember when I had my first real job, at the Art Gallery of New South Wales in Sydney—this would have been 1995—I walked through the Domain and across Martin Place to get lunch. I was walking with the curator I worked with at the time, Hendrik Kolenberg. As we crossed the square, we saw a father grab his son (aged about three years old) and give him about six really hard smacks, more like whacks, on the back of his bare legs. My stomach lurched and I remember, being pregnant, finding this violence upsetting. Hendrik put a hand on my arm and said: "you don't know what happened just prior to those smacks. You don't know what that child is like or what that father is like." In other words, don't judge someone else's life.

I often think about what I saw and Hendrik's reply. I once threw a pear at one of my sons when he was sixteen, in white-hot anger, and felt very ashamed of this. Shame is a powerful tool and an even more powerful benchmark for future behaviour. One of my plant humanities colleagues, Marcello Di Paola, has edited a book about plant ethics and creates a minefield of vegetal-value concepts. The book, *Plant Ethics* (Routledge 2018), focuses on relational versus value-in-nature plant ethics. Relational plant ethics interrogates the human practices that relate to plants, e.g. the normative criteria of plant cultivation (including flower-growing and cutting). Value-in-nature is less about the reasons to value plants. It's not about relations. Instead, it focuses on the values of the plants themselves, such as their integrity and their flourishing.

So, there is the notion of the value of plants, intrinsic to themselves. This suggests that plants have value, with or without human witness, or even with or without human consciousness. Then, there is the premise that plants have value because of what they do and how they thrive or flourish; this is the value-in-nature model. The only problem with this model is: what happens when the plants are no longer in nature and no longer thriving? Does their value deteriorate over time, in time with their diminished flourishing?

Karen Houle writes about plant ethics in a way that extends her ecofeminist writings, by reminding humans of our entrenched dualities—left/right, either/or, good/bad approaches. These inherited approaches do not account for the

non-binary thinking of plants that might be more appropriate for the multiplicities and distributions of plant life. Also in this book, Angela Kallhoff talks about "flourishing" as a kind of yardstick for value, against which plants are harmed or benefitted.

If we apply one of these ethical approaches to the abandoned grass tree, left in front of your neighbour's house, it could be Kallhoff's "flourishing" concept. Kallhoff describes "flourishing" as the development of a good life according to innate capacities. If plants, as we now know, can learn, remember, and decision-make (Gagliano), then these activities and organisational capabilities can be seen as "flourishing," or developing a good life. Plants undertake their activities in order to thrive, to develop well. A plant that "flourishes" is living a good life. It is vital and copes with stresses. Kalhoff says this provides a yardstick for assessing harm.

So, for Marie, her neighbour's grass tree is a good example. It had "flourished" before it was cast aside. We know this because the caudex (or thick trunk) is well established and wide. It has no foliage now, no green leaves anymore. Therefore, it is likely that it has been harmed or damaged. This grass tree has been thwarted in its "flourishing." Hence, this pre-moral position suggests that its treatment was unethical. Plants work hard at their own "flourishing." So, being stopped from that process of developing a good life is not ethical.

Marie's grass tree no longer lives a good life, no longer works to develop one: it no longer "flourishes." What follows is morality. Whose responsibility is it—the grass tree owner who abandoned the tree? Or Marie's responsibility because she has witnessed the non-"flourishing" and has a moral framework within which she may or may not act to restore that "flourishing." What, Marie, have you decided to do?

MS: I heard back from my neighbours about the grass tree. The workmen checked with the owners and said I could take it. They also thought it might be dead. If you are a grass tree, how do I know if you're dead?

PG: The cells of plants keep changing after death, like dead human cells do. Decomposition takes time. For plants, decomposition of leaves takes one to three years. A human body in a coffin can take ten years to decompose, or around ten days if left outdoors, with the help of such insects as maggots.

Usually we consider a qualitative end-of-human-life as being when the human has stopped breathing and their heart no longer pumps. What follows

is a declaration of death. This declaration of death is less common with plants, and this is yet again connected to vegetal value. The timely pronouncement of human death is important for legal reasons, but plants do not enjoy legal personhood, although there are a couple of exceptions, such as the Whanganui river ecology in New Zealand. There, plants that are damaged or prevented from living can be represented in a court of law.

As a result, the timing and accounting for plant death is different from animal versions. Should a plant be considered dead as soon as it is harvested? When a plant is pulled up by the roots or cut away from the rest of a plant, it's possible to think this might be the moment of attributable death because it can no longer grow, draw up water, extend its roots for nourishment, or photosynthesise. However, a cutting could be replanted or grafted. The end, surely then, is not at the point of harvest.

Think of the cut flower industry, where there is economic value from the moment the plant was cut, through the floristry industry's various iterations and transports, to the moment it's placed in a vase in someone's home. Its longevity in the home is prized. But this may be considered a longevity of death, rather than of life. Humans are not harvested, as plants are, so the point of death has more clarity with the former.

Plants in the herbarium have a different story. In this case, plants are collected from the landscape, brought back to the gardens, and pressed between newspaper sheets. Then, once they are clamped between board, they are placed in the freezer for a week to kill off any insects. The idea is to dry out the cut plants, so they will later be mounted on a page of paper using tape and labelled.

However, are these plant specimens dead? They keep on changing once they are mounted. Their cells continue to work for some time. They lose colour and texture in their ongoing decomposition. I have smelled the scent of plants when I open herbarium specimen sheets. I have felt the life/death of plants taped to a page. I'm not sure I would use the language of death to these specimens because they maintain their value as archival artefacts. They continue to have value, as subjects for genetic testing and molecular research. Some are extinct in the wild and are the only record of previous life. For this reason, their liveliness lasts longer than their habitat versions.

It is a strange irony that plants' lives are not valued as highly as human lives when they are flourishing in their natural habitats, but, then, once they are dead, they are kept and revered in boxes in a human institution. You could argue

plants are considered to be flourishing once they are dead because the herbarium valuing of plants is high, higher in many cases than in the landscape.

It begs the question: are dead plants in herbaria less threatening because they have lost their unknown and inaccessible liveliness? Humans do not still quite understand what plant life and independent agencies of plant lives mean. Humans still consider humans as having more agential life. As discussed above, plants are not considered lively even when they are thriving. Plant value as lively thriving or flourishing is considered less important than animals' and insects' liveliness or aliveness.

Human death can be attributed to abandonment and lack of care, and this could be considered the same with respect to plants. Plants can die naturally of old age or disease or drought, and this kind of plant death can be considered tangible and/or legitimate, only if we accept that we don't know whether or not plants choose to die.

To finally answer the question: how a grass tree knows it is dead? I suspect that a grass tree, kept in a plastic pot and located in a chilly Melbourne suburb, is already pretty confused—not just about death, but life too.

MS: I think it was indeed confused and had been for some time. In fact, its life was likely on a tragic trajectory from the time it was harvested for the commercial market—legally, one hopes—until its supposed end. I say "supposed" because after my exchange with the builders (who I determined were not gardeners, but a sort of backyard blitz crew), who left the plant in a certain part of this neighbour's front yard for me, it disappeared again when I went to collect it. The weather had been Melbourne winter at its dreariest—a fortnight of grey and incipient storms that made the days a linked-up chain of drizzly patches—so I wasn't walking past the plant every day. When I did walk down to the house again, where it had been sitting was replaced with a red Cordyline that had been "planted out." The grass tree was gone, undoubtedly in the skip that had been in the driveway for months, but had now also been taken away. They probably also thought it was dead, as apparently there is a high failure rate for them, particularly if not planted out, and from the way it sat in the pot, I think it never was. The owner of the house seems to be away for long stretches, and if it was potted for a long time, it probably dried out. So, it likely died of neglect.

I had noticed one thing about its caudex, which was that it looked like it had been ringbarked, but in a spiral. The groove it caused was consistently about 2 cm in width, presenting as an upward curving line around the caudex; it didn't

look accidental. It was as if its dried frond stubs had been picked off in a "she loves me, she loves me not" game, which, of course, is an aggressive act on a plant. The hypothetical scenario, wherein it died because it was firstly transplanted from the bush, then never planted out, became dry, and was then physically damaged, when taken together, seemed like a very sad tale.

In reflecting on this, it reminded me that Klaus Eder has noted that our interactions with nature have such a "moral dimension" (Eder 26), but that our focus is often on the "use value" of the natural world. He notes that the "modern relationship to nature has reduced the symbolic significance of nature to a minimum. Nature has become a symbolic form without a significance of its own. Even garden plots, a refuge for the symbolic significance of nature, are being depreciated to the 'quick and easy'. Plants such as the thuja tree lose their earlier symbolic significance; they are nothing more than a hedge that requires no work, provides visual protection against others and creates the illusion of being evergreen. These remnants of symbolic signifiers of nature express a relationship to nature that strives to efface everything which cannot be measured by the yardstick of utility. Modern society has made great strides in the attempt to erase these broader symbolic meanings from its collective consciousness" (Eder viii).

You had noted what the symbolic meanings of a grass tree were for you at the outset of this interview. I thought it interesting you called it a cadi tree of Cadigal land, as I tend to associate them with south Australia, where they are sometimes called "yakka trees," a name derived from the hard work of harvesting the sap, which can be used as a glue. And they also occur not far from where I live in Victoria, at Wilson's Promontory, a three-hour drive south towards Bass Strait. In the end, it wasn't the Victorian weather that did the grass tree in, but a system that started with a lack of respect for its symbolic meaning, which set off a series of events wherein the use value supplanted any other meaning. When there was no longer use value, it was discarded.

MS: The next question. Is it possible to engage an allegiance with the grass tree and a discussion on plant blindness to entwine the use value in which contemporary society is so immersed with the symbolic significance of plants that Indigenous cultures worldwide value, create, and preserve? By identifying these differences, do we work our way towards solutions and shared approaches, or continue to endorse their separation?

PG: I like your question about "use value versus symbolism." I think there is only a problem (or a division) when use tips over into instrumentalisation of plants—using plants with a greater human action in mind, without care or thought for the plant. Symbolism and meaning, whether Indigenous or non-Indigenous, are created, constructed, and shared, but they also constantly change and shift, as memory and association do too.

For example, last weekend, I decided to make some protection medicine for my three children. As content, I used three trees I'd previously chosen for each of my children: an angophora (the vessel), a casuarina (wise sage) and a frangipani (fertility, overcoming difficulty). These vegetal/cultural associations were derived from the complex web of my own lifethe stories whispered to me by family or blown from the pages of books, about trees. These cultural relations repeat, diverge, and refresh.

Prior to the vegetal cooking process, I set about gathering ingredients. There was a blanket of casuarina needles and seeds under the grove across the road from my house. I asked permission from the tree and gathered a few needles and seeds, along with a small amount of broken-off bark. The fallen and dried leaves of my back-garden, potted frangipani were perfect, and, again, I asked permission of the frangipani to shave off a little of its branch to dry in preparation. Finally, I had to travel to my childhood park to find some angophora leaves and twigs that had fallen in plentiful supply. I was confident I had not disrupted the natural seedbanks at each place, I had not over-harvested, I had not taken disrespectfully.

But isn't what I've just written typically white settler—to claim a stake of moral superiority? I think it might be a complex form of re-colonial imperialism to extract and extract. Have I not, in fact, just stolen vegetal stuff? I asked permission, but I didn't hear a human reply, nor a vegetal one that could be translated. I think I just hoped permission was granted.

I am not a tree, no matter how I wish I were. Even if I stand on one leg and throw my arms up in the air and wave them around (like we were taught to do when I was a pre-schooler), I am still not a tree. Morally, I like to think of trees as kin, to write about them as my community. But I've not heard back if this is acceptable. My only experiences are of sound and movement in trees and plants that I have come to know. While I feel deeply connected to them, I'll never know if the feeling is reciprocated. Perhaps this is the real source of solastalgia—that humans don't know the language, can't speak tree.

Nevertheless, I waited until this collected vegetal matter had dried, and then I burned it, using a sage bundle to keep the fire alight. I snipped a bit more of the sage into the fire too, as an extra cleansing uniformly followed across many cultures. Once the ash was cool, I tipped it into three glass jars and corked them. My children received their protection ash with their usual mix of kind reverence and mild confusion.

I'm not sure if the three trees involved will know what has happened. The frangipani bore witness, and the casuarina was close enough to notice the smoke. But I'll never know if they were complicit. I do know that I have been making concoctions and elixirs, charms and potions for over eleven years and that I draw on my own history of experience and reading, both real and imagined. It is unclear if my protection-ash-making is ethical or appropriate. It is unclear if it is appropriation or ventriloquy. It is unclear if it will work or fail. However, it is ongoing: these cultural acts emerge and then vanish. The urge rises up, and I can't resist. Like writing. Like my use of oxygen to breathe.

I have started to wonder whether plants care if we care or not. Plants don't need human consciousness or human witness or human permission to flourish, to thrive. So, why are those of us in the plant humanities spending so much time trying to impress them?

PG: My question to you, this time around, Marie:

When you realised you hadn't saved the neighbours' grass tree in time and that it probably had been chucked out in the skip, how did you feel? What will you do next?

MS: I was disappointed. I'm the kind of person who buys plants that are on the quick-sale table at a garden nursery to see if I can bring them back from the brink. Whatever success I have in that is really warming; about half of them come back.

But there was an upside. It turned my attention to the grass tree I already have in my front garden, which suffered quite a bit in the decade I was living interstate, much of which was during the drought. I planted it in about 1994, and, typically, it grew slowly, but quite well. It even flowered about three times over the next fifteen years—although flowering is a sign of stress, not of well-being. When I returned to it in 2020, it was barely alive. Much of the garden was unrecognisable, but it was the grass tree I was most concerned for as it really looked on the brink. I had planted it near to the house as it likes a little

lime and the footings of the old brick house leech, just enough from the ageing mortar to keep it happy. I have a waratah that benefits from a similar position in another part of the garden.

I've cut away some the dried skirt to get some air circulating around it and removed all the years of dried leaves from the Corymbia, which dominates the space, that had gotten wedged into the base of its long, spiked leaves. Now that it's been in its position for nearly thirty years, I wonder if I planted it too close to the house, but I dare not relocate it. I've also been considering how to get it to flower again. I've read if you put a box filled with newspaper over it and set it alight, you can smoke it into flowering. How to do that and not set the house on fire is the conundrum that has held me back, but through responding to your question, I've done more research and read that another way to cause the stress that will encourage it to flower is to place a small stone on the growing tip, as "the stone causes enough stress that the flower will form, a little like a pearl forming inside an oyster" (Allgreen Nursery & Garden).

I thought I would see if I can put that lovely simile into action. I have a stone garden out the back, so literally thousands of stones from which to choose, particularly of the recommended 5-8-cm size. But first, I tried to have a look at its growing tip. It has lots of new leaf growth, so much so that I can't really see a tip at all. Peering into the centre from where the new green shoots emerge, it seems somehow wrong to be dropping something into the heart of this plant when I was just plucking litter out of it only three years ago. Its growth is finally progressing now—I know someone whose grass tree has grown much more in the same timeframe—and is due for fertilising in the autumn. It somehow doesn't seem quite right to stress it at all, but particularly when it's made good progress. Smoke-infused water could also work and would be a lot less invasive, so I'll set off to explore that method.

I hadn't previously considered that I could also propagate new grass trees from the seeds, and that is a possibility if it does flower and set seed. No special treatment is needed to germinate the seeds, but they do have a low success rate, so sowing many is recommended. It's not lost on me that had I done that in the other years it flowered, I'd have a garden of "young" grass trees now. They grow slowly, at around 2 cm per year, and can live to 350-450 years old. If it flowers in the next year, I could have new grass trees to enjoy if I grow into old age, by which time many more of the Xanthorrhoea could be classified as "vulnerable to extinction," as Xanthorrhoea arenaria and Xanthorrhoea bracteata now have.

Stepping back from that, a handful of grass trees in a suburban garden will make no difference to retaining a species, and I question whether that is a justification for the "use value" of controlling nature for my own purposes, those of being able to enjoy a grass tree that flowers—a further extension of the gratification I receive in "repairing" plants. What do you think, Prue; is this misguided and too singular to be of any consequence, or does every action of seeing plants matter?

PG: To be honest, I do believe in grassroots conservation. Your saving of one or more Xanthorrhoea trees is hugely important, because it keeps the tree's story alive. Even if some species are vulnerable or critically endangered, they're not gone yet. And even better than seeing plants is engaging with plants, as you do. If everyone made a point of engaging with even one tree, that is an improvement for ecological sustainability, but also for the quality of human experience.

PG: Do you think art/dance/narrative are good tools for spreading that plant-seeing message? How do you think art works to make the vegetal more real? And what plant are you?

MS: Our lack of ability to see plants is an issue of culture, so addressing plant blindness is best approached through cultural methods. I think all cultural practices are suited to increasing the visibility and awareness of plants, of "seeing" them. Visual art, music, dance, theatre can all be engaged in manifesting the vegetal, and not just in didactic ways, but in nuanced and enduring ways that become part of our social fabric. Awareness of the environment, of climate change, and of plants is derived from a posture that is culturally formed. However, culture is both enduring and agile, with a plasticity akin to the plasticity of the brain; it can continue to expand and develop. One of the key purposes of art is to "shape" a new approach to a preconception, an ideal, or a problem, which can deliver innovative perceptions by calling into question what we think we "know." In the case of plant blindness, art forms can cut through hundreds of years of anthropocentricism by giving plants a platform from which they can be both represented and recognised.

The grass tree I've had for years is doing well now after some recent rain, and getting a lot of new, green shoots. I might not give it smoke water for another year to let it recover further. The Corymbia and other plants in the garden barely flowered this past year, instead getting a lot more leaf from all the rain

last spring. It can wait—and let's be clear, that really means I can wait—a little longer, as a long period of neglect takes time to come back from.

Another treasured plant in the garden is the one I identify with the most, and that's the waratah. I planted it in a similar spot—close to the concrete footings of the brick house—even before the grass tree, to replace a banksia the previous owners had planted that had run its course. While I lived interstate, the waratah was not pruned annually and got tall and sparse, and I've been cutting it back after every spring flowering since returning three years ago. It is a bit hit and miss to prune, as sometimes it will shoot off older wood, but often not. It is very resilient in general, but also a bit fickle and challenging—with the reward being the incredible blooms in spring. It will re-sprout after fire, something it shares with the grass tree, so I might try the smoke water to see if it has any effect on its vitality.

It grows just above the fence, and there is someone in my neighbourhood that ripped off an entire a branch of it last year, reaching over from the footpath, which would have required partially climbing the fence, to get a prized flower. They are not common in the area where I live and very showy, so the temptation was too much. After that event, I pruned it to encourage growth in the opposite direction. Ironically, that flower thief is definitely a person that sees plants. They are notorious in our street come spring, as they're completely non-apologetic, even when caught in the act. I can't blame them for being able to see.

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