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# River stories: Genealogies of a threatened inland river system

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#### Abstract

Most people now living in Australia's "bread basket", the much-degraded Murray Darling Basin, are like my family, descendants of convicts or free settlers who came to the inland in the 19th or early 20th centuries. Our legacy includes the dispossession of indigenous peoples, species extinction and the ongoing degradation of the ecological communities which now sustain us. My own family's river stories which "begin" with a pair of impoverished Gaels who migrated with their offspring from the Scottish Highlands, can be considered paradigmatic. I re-narrate it in this essay in response to philosopher Alasdair MacIntyre's challenge—*I can only answer the question 'What am I to do?' if I can answer the prior question 'Of what story or stories do I find myself a part?* 

Some of these family stories I find myself part of, especially those that have been enacted within the catchment of the now-threatened Lachlan River, are very discomforting, but where do they "truly" begin? In seeking to understand my relationship with the river and its catchment, and with the indigenous peoples "my mob" displaced, I explore several possible "beginnings" and ask a further question: what stories do I *want* to be part of as co-author, co-narrator and protagonist. I then offer my own yet-to-be enacted "truth and reconciliation" stories about the future of the inland plains I love.

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#### 1. A beginning

I can only answer the question 'What am I to do?' if I can answer the prior question 'Of what story or stories do I find myself a part? [1]

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I write this in a small rural town in central New South Wales beside a river slowly meandering towards its terminal wetland, the Great Cumbung Swamp, in Australia's Murray-Darling Basin. For most of its 1500 km journey from its headwaters this river flows through Wiradjuri country to trace the presence of Baiamai, the father of creation, Wawi the rainbow snake [2] and other ancestral beings who created and enlivened this landscape. Wiradjuri descendants know the river as Galiyarr, or Kalari [3,4], and 2000 generations of ancestors are interred in its alluvium. Indeed, humanity's oldest ritual ochre burial<sup>1</sup> and oldest cremation<sup>2</sup> have been found on the foreshore of a paleo-lake that was once filled by Galiyarr, and samples of our species' oldest mitochondrial DNA have been taken from these skeletal remains [5].

But in 1815 the river Galiyarr acquired another name.

In this year British convicts completed the first rough "carriage road" [6] across the Blue Mountains to "open up" the inland to British colonists and their stock. In May of this Year Zero of the Conquest of Wiradjuri country, and within a week of Governor Lachlan Macquarie formally proclaiming the huddle of bark huts and barracks at the end of the track the colony's first inland "city", a young English surveyor, George William Evans, set out to find the fabled inland sea [7] of what, to the British, was still terra incognita. Instead of a sea Evans and his party discovered a dry and stony river bed at the bottom of a steep gorge. They followed it until it became a string of languid pools: "An handsomer and finer Country I never saw than what I have been over these last two Days; greatest part of the Land is good; Timber is its worst production; Kangaroos Emu and Wild Ducks are very numerous", Evans wrote in his journal. They rode on through open riparian forests of casuarinas and eucalypts: "The Country continues good, and better than ever I expected to discover", Evans wrote. And to ensure that posterity would remember him, he carved his name into the flesh of an ancient tree: Evans 1st June 1815. A few days later he re-named the river in honour of his boss, and returned to the frontier outpost Governor Lachlan Macquarie had already named for Lord Bathurst, Britain's Secretary of State for War and the Colonies [8].

George William Evans explored Wiradjuri country again in 1817, this time with Surveyor-General John Oxley "for the purpose of ascertaining the course of the Lachlan River, and generally to prosecute the examination of the western interior of New South Wales" [9]. Oxley's journal now provides us with the most reliable account of the condition of the river and its tributaries in those early days of the invasion. But even as they were leaving Bathurst the two surveyors were imagining the future of the clan estates they were passing through: "The mind dwelt with pleasure on the idea that at no very distant period these secluded plains would be covered with flocks bearing the richest fleeces, and contribute in no small degree to the prosperity of the eastern settlements," Surveyor-General Oxley wrote [9]. And so, along this river too, sheep and other ruminants became "a more relentless occupation force than regiments of red-coated soldiers" [10], as the native grasses the Wiradjuri had so judiciously managed for millennia were converted into fibre for the rapacious mills of northern England.

The impact of the British invasion on the Wiradjuri is well documented: "We have seized upon the country, and shot down the inhabitants, until the survivors have found it expedient to submit to our rule," one eye-witness, Edward Landor, wrote in the mid-1840s

<sup>&</sup>lt;sup>1</sup>Mungo III, buried an estimated 40 000 years ago.

<sup>&</sup>lt;sup>2</sup>Mungo I.

[11]. Another observer, Lt. Colonel Godfrey Mundy, who visited central western New South Wales in 1846, confirmed the brutality of the conquest: "Dreadful tales of coldblooded carnage ... are whispered about in the provinces and although there be Crown Land Commissioners, police magistrates and settlers of mark, who deny, qualify, or ignore these wholesale massacres of the black population, there can be no real doubt their extirpation from the land is rapidly going on" [12].

Many of the Wiradjuri pragmatically accommodated the colonists, but others resisted the invasion in whatever ways they could. From the early 1820s, for example, the warrior Windradyne led a well-executed guerrilla campaign on the Bathurst Plains [13], to which the colony's then-governor, Sir Thomas Brisbane, responded with troop reinforcements and, on 14 August 1824, with a declaration of martial law. As Wiradjuri descendant Stan Grant comments in his recent memoir, "For the first and only time on Australian soil the slaughter of my people—the Wiradjuri—was legally sanctioned" [14].

The Wiradjuri's dispossession was completed in the second half of the 19th and early 20th centuries when parallel narratives about the racial superiority of Euro-settlers and the "moral virtue" of yeoman farmers were enacted across the inland. As Wiradjuri people were moved off their land and forced into government reserves, church missions or into their own informal "refugee" camps [15,16] their clan estates were transformed into a grid of European-style farms. In one of the clearing frenzies that followed each of the colonial and post-Federation land reforms the tree into which assistant surveyor Evans had carved his name at the beginning of the Conquest was "inadvertently ring-barked and killed" [17], but this loss fades into inconsequence beside other "inadvertences" of European-style agriculture and pastoralism.

The list of "inadvertent" consequences of Euro-farming includes the ongoing destruction of Wiradjuri heritage, degraded riparian and aquatic ecosystems, poor surface water quality, rising water tables, extensive dryland salinity, soil erosion, reduced fertility, loss of native biodiversity, increased greenhouse gas emissions [18]. This "inadvertent" degradation which now threatens the future viability of rural towns and farming communities [19] is *still* being perpetuated: indeed, within the greater Murray Darling Basin more land is still being cleared annually for agriculture than is being revegetated, protected or remediated [20]. As many commentators remind us, the only other countries with higher rates of deforestation than Australia are Brazil, Indonesia, the Democratic Republic of Congo, and Bolivia. For a developed country this is not good company.

The ongoing loss of biodiversity through habitat destruction is, for me, the most immediately alarming "inadvertent" consequence of the resource management strategies associated with Euro-farming. And it is very noticeable. Small marsupials, including the bandicoots, koalas and potoroos my grandparents remembered, are now locally extinct, and many of the species I recall from my own rural childhood as being prolific, including wild budgerigars, brolgas, catfish and yellow bellies (Golden Perch) are now rarely seen. In all 44 plant species, 3 native fish, 8 amphibians, 16 birds, 6 mammals, and 4 reptiles that are native to the Lachlan catchment are now listed as endangered or vulnerable under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 [18]; and three threatened ecological communities, including the once extensive Box-Gum Woodland community<sup>3</sup> and Grassy White Box Woodland,<sup>4</sup> are also listed under State and

<sup>&</sup>lt;sup>3</sup>Now listed under the NSW Threatened Species Conservation Act 1995.

<sup>&</sup>lt;sup>4</sup>Listed under the Environment Protection and Biodiversity Conservation Act 1999.

Commonwealth legislation. And now the entire river system itself, all its tributaries, billabongs and wetlands, has been formally listed under the NSW *Fisheries Management Act* 1994 as an endangered aquatic ecosystem "likely to become extinct in nature" [21]. This is the legacy my generation of settler-descendants has left to the future.

## 2. The inland of my "belonging"

This biopolitical story of cultural and environmental destruction and loss is *my* story, and these damaged inland plains are my *duthchas*,<sup>5</sup> my belonging [22,23]. I am inextricably bound to them, as I am to the river and its ephemeral streams, by a lifetime of personal memories and by 160 years of family and community narratives. These stories are integral to my *habitus* [24], my subjectivity, my very being-in-the-worldness, but they are also intensely discomforting—because they are victors' stories, and as such, they explicitly exclude, silence or subordinate the human and non-human "others" who have been part my life and the lives of members of my extended family for many generations.

For me, the most immediately discomforting of these many narrative occlusions is my extended family's "forgotten" relationship with the people of the Wiradjuri nation. To me it does not matter whether or not my ancestors actively participated in the Conquest or the massacres associated with it [12] because we have all been the beneficiaries of the Wiradjuri's dispossession: and however many years we, or our progenitors, may have cultivated the soil and grazed our sheep and cattle on the floodplains and slopes, however deeply felt our emotional attachment to the inland is, and however much we feel we *belong* here, we have to acknowledge that *our* stories about who we are and where we come from *all begin somewhere else*. They do not begin on this river with Baiamai, Wawi and other ancestral beings as Wiradjuri stories do.

#### 2.1. Definitions

I write this as a cultural practitioner, a writer of both "fiction" and "non-fiction" rather than as a social scientist, and I use "story", "narrative", "discourse", "myth" and "text" interchangeably to signify *all* narrative representations [25,26], whether they are "true" or "imaginary" [27]. These representations include the personal life-stories we tell ourselves and others about who we are [28], the narratives that "sustain the nation" [29] and other collectivities, such as families and rural communities; all the conversations we participate in; all the parliamentary Acts, policy reforms, "blueprints" and strategic plans authored in the name of colonial, federal, state or local government authorities and other agencies for the "common good"; all the texts we are exposed to across all media in our everyday lives; and all the "grand narratives" and civilisational myths we may hardly be aware of. From this narratological perspective the dispossession and social exclusion of Wiradjuri people and the degradation and loss of biodiversity are "enacted narratives" [30], the reification [31] or embodiment of Euro-stories that were first hauled across the Blue Mountains in 1815 as part of the cultural baggage of colonisation, and of countless other narratives that have been told and internalised since colonial times to "systematically form the objects of which they speak" [32].

<sup>&</sup>lt;sup>5</sup>Gaelic for belonging.

But where do these stories 'begin', and how is it that I—and perhaps you—are part of them?

# 2.2. Initial conditions

Beginnings are arbitrary, as any storyteller knows, but in its most familiar narration my river story "begins", like so many other Euro-settler narratives, with the arrival of a set of Gaelic great-great-great grandparents on a sheep run in 1840, in the Lachlan's headwaters where Wiradjuri territory adjoins the clan estates of the Gandangara and Ngunawal peoples [33,34]. By the time my impoverished forebears, Donald and Margaret McInnes and their children and siblings arrived Governor Lachlan Macquarie had already renamed these southern Uplands County Argyle in honour of his own Scottish homeland [35,36], the same Argyllshire from which my ancestors [37-39] and thousands of other landless Gaels were exported as "redundant population" [40]. So, after 4 months at sea and 3 weeks on a bullock dray from Sydney, Donald and Margaret McInnes and their children found themselves back in the future, in a county with the same name as the one they had left behind, working for another Gaelic laird, the part-time Squatter, soldier, police officer and "merino magistrate" Captain Lachlan McAlister, on a sheep run named Strathaird for his family estate on the Isle of Skye [41]. The Highland Gaels had done in the Antipodes what colonists always do: they had enacted their most familiar stories to replicate the society they left behind.

Donald McInnes was already 50 when he and his family arrived in New South Wales, and Margaret, or Peggy, was a decade younger. They were probably illiterate, probably only spoke Gaelic, and they were Catholics in a colony dominated by English and Scottish Protestants. Their opportunities might seem extraordinarily slim, but in sheep-obsessed New South Wales at a time when convicts were no longer available to Squatters as slave labour, their skills were in demand—because Donald was a shepherd, as were two of his adult sons, and Margaret was a domestic servant.

When they emigrated, the McInneses were living on Eilean Shona, a rocky outcrop at the entrance to a loch in the parish of Moidart within what was then one of the feudal estates of the Macdonalds of Clanranald. Circumstantial evidence suggests that Donald and/or some of his extended family may have been resettled on the island after the 1794 "clearance" on a Clanranald estate at Rhu-Arisaig, an act of dispossession which parallelled the "extirpation" that was soon to occur in inland New South Wales. Recent DNA analysis [42,43], palaeobotanical evidence [44] and biological morphometrics [45] suggest that the family's forebears may have been grazing sheep and cattle and growing subsistence cereal crops in the Scottish Highlands since the end of the last glaciation, so in this sense, Don and Peggy were aboriginal people. For them every peak, strath, loch, burn and brae they left behind must have been as deeply storied as their new homeland was for the Gandangara, Ngunawal and Wiradjuri peoples. Being forced to leave must have been heart-rending.

The family sailed from the fishing port of Tobermory on the Isle of Mull on 6 September 1839, on the bounty ship George Fyfe, and disembarked at the hot and dusty colonial outpost of Sydney on 23 January 1840. Their new laird, Captain Lachlan McAlister, probably despatched them straight to Straithaird, the 16,000 acre sheep run on the Breadalbane Plains where the Lachlan River rises. We descendants know little about Peggy and Donald's lives at this time, but we do know that by the end of their first decade in

County Argyle, New South Wales, one of their sons, Angus, had purchased his first 30 acres of bushland on the eastern side of the watershed. A few years later, in 1852, the old couple purchased an adjacent 30 acres themselves and built a small stone cottage not unlike the one they left behind in Scotland. In that same year their third son, Gregor, married a neighbour, Anne Gibson, and soon after bought another 30 acres of bushland. Two of these small blocks are still "in the family" as part of a larger holding that is now owned by one of Angus's many descendants; and fine wool merinos now graze the straths and braes old Donald, Margaret and their children cleared and drained to fulfill dreams that would have been undreamable had they remained in the Scottish Highlands.

Gregor and Anne McInnes, my great-great grandparents, re-enter the historic record in the 1870s when they migrated down the Lachlan with their adult son Allan and Gregor's brother Donald to "take up" land near Lake Cargelligo [46] in the river's semi-arid lower reaches. Brother Donald named his new property Strathaird after the sheep run on which the family began their life in the colony, while Gregor, Anne and Allan called the land they purchased Boorathumble Station after a conspicuous hill that is of great symbolic significance to Wiradjuri people. Young Allan married Mary, a devout Wesleyan whose father, an carpenter from Ayreshire, had already established a successful business in the colony building homesteads and shearing sheds along the inland rivers. The couple raised 11 sons and one daughter on Boorathumble Station with the support of Wiradiuri "housegirls" and station workers, Chinese gardeners and labourers, travelling Afghan or Punjabi hawkers and haulage contractors, resident governesses and tutors, and diverse other "service providers" who are now rarely mentioned in family anecdotes. Their only daughter Agnes married a young "grazier" she met on a bush tennis court and moved with him upstream to Condobolin where his parents had selected land after one of the 19th century land reforms. This couple had three daughters, the eldest of whom, my mother, married a returned serviceman who came to the district as a shire engineer. My parents settled on an irrigation block on the river where I spent my early childhood, and in the 1960s purchased a larger farm on one of the Lachlan's many tributaries. One of my brothers now runs this property to continue our family's long association with sheep and cereal crops, a tradition which probably stretches back unbroken to the end of the last ice age when our distant ancestors first began intensifying their subsistence strategies on Scotland's Atlantic coast. This story I am part of is one thread of a global web of stories about displacement and resettlement, dispossession and environmental degradation, and will be familiar to thousands of people in rural Australia.

#### 3. More arbitrary of beginnings

Within classical "Western" narratology stories are understood as representations of actions, events or ideas that are organized into a beginning, middle, and ending (or conclusion) through the device of a plot so that they appear to be causally connected [27].<sup>6</sup> Any number of "real" or imagined events can be selected as "beginnings" for stories about the interconnected dispossession of indigenous peoples and the ecological degradation of Australia. Some storytellers choose the "discovery" of the continent's east coast by Captain James Cook in 1770, for example; others opt for the arrival of

<sup>&</sup>lt;sup>6</sup>Causality is, of course, now understood as being much more complex than can be adequately represented or "captured" by any single narrative.

the first 11 prison ships in Sydney Harbour in 1788 with their cargo of convicts, marines and seamen, and the first sheep, cattle, horses and cuttings and seeds of European plants. Storytellers who zoom in on the inland rivers of New South Wales, as I do, also have many "beginnings" to choose from: the first crossing of the Blue Mountains by British settlers in 1813, for example, or the completion of the road across the Great Divide in 1815, the event I have arbitrarily selected as the beginning of the Conquest of Wiradjuri country.

Deborah Bird Rose, an anthropologist who has done much of her work in Northern Australia, "begins" her story of the British Conquest some 10000 years earlier "when our ancestors domesticated cattle and began a long and intermittent career of cattle herding and raiding" [47]. Rose's early "cowboys" include the Indo-European speaking Celts who galloped across the Eurasian steppes to conquer the hunter gatherers of Western Europe in much the same way, she speculates, as Euro-settlers conquered the indigenous peoples of this continent. Rose's provocative notion of the "Cowboy diaspora" [47] is useful in understanding the colonisation of this continent's cattle country and the impacts of the cattle industry, but recent linguistic work suggests that Indo-European languages (and, by inference, Indo-European narratives and the material culture associated with them) were spread not by galloping "cowboys", but by proto-farmers from Anatolia [48]. Other researchers nominate hunter-gatherers migrating from southwest Asia at times of rapid climate change [49] as the key protagonists in this transfer of genes and memes. Given my own rural background, the Anatolian proto-farmers scenario is particularly appealing—so let me begin "my" story about the Conquest of Wiradjuri country and my own genealogy again, not with galloping Celtic herders, but with the Anatolian hunter-gatherers turned proto-farmers who first domesticated the species my family now grazes and cultivates along our small tributary of the river Galiyarr, or the Lachlan [50].

### 3.1. Sheep and wheat and Çarşamba Çay

DNA analysis suggests that the progenitors of the merino sheep on our farm in central New South Wales include the wild moufflon, Ovis orientalis, a native of Anatolia and Iran, and one or more wild but still unidentified ancestral species from central or southwest Asia [51,52]. The progenitors of the wheat cultivars my grandparents, parents and brothers have grown within the river's catchment include Triticum monococcum, or einkorn wheat grass, and T. dicoccoides, or emmer wheat, both of which are also indigenous to Anatolia and still grow wild there. Plant geneticists and paleo-botanists cannot agree where emmer wheat was first domesticated, but there appears to be general consensus that einkorn was domesticated once and only at one site, the slopes of the Karacadag Mountains in south eastern Anatolia, [53,54].

By 9000 years ago new stories about einkorn wheat had spread throughout Southwest Asia along with the seeds themselves. We know from archaeological evidence that wheat stories were being enacted at about this time by the inhabitants of a mudbrick "city" on the banks of another river which, like Galiyarr or the Lachlan, disappeared into a terminal wetland on a relatively stoneless inland plain. That paleo-river is now known as Çarşamba Çay; the landscape it once drained is called the Konya Plain, and the Neolithic "city" that grew up on its banks is now Çatalhöyük, an archaeological site west of the Karacadag Mountains where these wheat stories "began".

#### 3.2. The view from the top of the tell ...

In 2001, I made a "pilgrimage" to this archaeological site to find an alternative "beginning" to my own family's river story. Most visitors to Catalhöyük understand it as the "beginning" of urbanisation, or "Civilisation" [55], and/or they associate it with "mother goddesses" and matriarchy [56-59]. These relationships are seductive, but by 2001 Catalhöyük represented for me one of several "beginnings" to a 10000 year long tragedy about the degradation of the planet's temperate grasslands, woodlands and wetlands and the dispossession, even "extirpation", of the indigenous peoples who had occupied them since time immemorial. While enough Wiradjuri survived the invasion and conquest of inland New South Wales to enable their descendants to reconstruct their identity as a distinct people, many of the native species and ecological communities that were part of their world before 1815 have not survived, or are so threatened or endangered that they could become extinct in my lifetime. And the view from the top of the accumulated remains of 9000 years of agro-urban development at Catalhöyük was not reassuring: all I could see was an oil-dependent monocultural grid of recently harvested wheat, irrigated maize and other summer crops, and lonely rows of agri-forest poplars stretching off in single file towards the mountains where this degradation "began". From the top of the tell the sixth mass extinction event in the history of Earth seemed all too unstoppable.

# 3.3. Nine thousand years of "inadvertent" consequences

The site of Çatalhöyük has been settled and abandoned many times over its long history [60,61], but of particular interest to me were the 18 Neolithic habitation levels representing 1200 years of continuous occupation from 9000 years BP. At its peak, this Neolithic "city" covered an area of 10.5 ha (26 acres) and was home to an estimated 8000 people, a population similar to that of the largest towns along the Lachlan River today. The inhabitants lived in tightly packed mud-brick houses with flat mud-covered roofs supported by timber beams. People entered their living spaces via stairways leading from holes in their roofs through which the smoke from domestic hearths, ovens and oil lamps also passed. Few of the houses had windows or doors, but many of their walls were decorated with frescoes of hunters, wild animals and geometric symbols, or with sculptural fixtures made from the crania and horns of aurochs (wild cattle) or rams [62,63].

The archaeological record reveals that the people who occupied these houses gathered most of their food and fibre from the river and from the wetlands and surrounding oak woodlands and grasslands [64]. They also hunted wild game, including aurochs, equids (wild horses), deer, pigs, and wild sheep and goats [65]. But a significant proportion of their food came from morphologically domesticated species, including wheat and barley which they cultivated on the drier slopes of the Uplands 10–15 km further west, and sheep and goats which were penned during the winter and taken upstream to graze before the Spring flood. There is no evidence that residents herded domesticated cattle, although morphologically wild cattle were certainly butchered on-site and were symbolically very important, as the frescoes and "altars" in the houses indicate.

#### 3.4. Same old stories repeated

Late 20th century and early 21st century interpretations of the archaeological record at Çatalhöyük challenge many established "Western" narratives about hunter-gatherer peoples and the relationship between early agriculture and settled societies, but they also confirm the ancient link between agriculture and environmental degradation. The pattern is all too familiar. Neolithic proto-farmers cleared the Uplands for wheat, barley and other crops, and grazed their sheep and goats on the slopes. Without its vegetation cover the soil eroded and was carried downstream to be deposited on the plain during the Spring floods. Grazing regimes inhibited the regeneration of vegetation, especially tree cover, so more soil eroded and the sediment load in the river increased. The level of the plain rose; the hydrology changed; and the wetlands on which the people of Catalhöyük depended for much of their food and other "environmental services" began to dry out. As people adopted bronze and then iron tools they were able to clear and cultivate more land, and so the rate of degradation increased and the level of the plain continued to rise. Climate change was certainly a contributing factor, but archaeologist Ian Hodder and his colleagues agree that "a fairly large component of human impact" [66] was involved in the environmental degradation that occurred on the Konya Plain and Uplands.

But the river was also depositing salt across its floodplain along with the eroded topsoil. Increased salinity reduced crop yields and made farming uneconomic, so agriculture was abandoned and could only be resumed when technological innovations enabled farmers to flush the salts from the soil. Photographs of the Konya Plain taken in the 1960s when archaeological work began at Çatalhöyük show a salted and harsh terrain very different from the grid of recently harvested wheat and irrigated maize I saw in 2001. This most recent "greening" has been effected by large-scale centralised irrigation which has allowed farmers to push the agricultural frontier ever further into the Anatolian steppe [67], a process which parallels that occurring in Australia's Murray-Darling Basin and other temperate landscapes where farmers are still clearing native vegetation for wheat and other cereals, oilseed crops and cotton. Irrigation has also caused the watertable to fall an estimated 20-30 m around Catalhöyük over the last decade, in part because farmers are perversely pumping water from private wells rather than buying it from the centralised irrigation authorities. The falling water table is not only drying out the archaeological site [66,68], it is also threatening the remaining native vegetation of the central Anatolian steppe [69]. And then there are all the downstream impacts of damming rivers for irrigation

The proto-farmers of Çatalhöyük could not have foreseen these multiple "inadvertent" consequences of their actions 9000 years ago, but in this re-narration of their story, of *my* story, we are all now reaping what they sowed.

## 4. In just "three human lifetimes"

The flora and fauna species that co-evolved over millions of years in Anatolia and elsewhere in Southwest Asia, and were first domesticated there from around 10 000 years ago, have been farmed, grazed and consumed in Australia for just "three human lifetimes" [70], a mere blink in this continent's two or more thousand generations of human occupation. The stories that accompanied these species to inland NSW were both genocidal and ecocidal, as many of us can at last acknowledge, but we settler-descendants

are not merely the narrators and perpetrators of stories from the past: we are also the coauthors, co-narrators and protagonists of new stories [71–73] about who we are, who we might become and how we might interact with the human and non-human Others who are also part of the complex socio-ecological system that is Galiyarr, or the Lachlan River. Recent research in the fields of cognitive science, psychiatry and narrative psychology confirms that the way we interpret the world and act in it changes as we integrate new stories into our consciousnesses or re-emplot already familiar ones [74–77], and it is in this narrative-driven capacity for change that I place my hope for the future of the inland I love, and for the planet.

Some of the more inclusive narratives now being co-authored, narrated and enacted or reified along Galiyarr are re-tellings of already familiar stories, but from different pointsof-view and in subaltern voices which expose aspects of our shared pasts that many settler-descendants have strategically "forgotten", have never learned, or are still in denial about. Some of these stories can be read and heard in the Wiradjuri language which is now being taught in some of the primary schools in towns along the river, or they can be experienced as literature, dance, film and visual art. Other "new" stories are localised threads of global sustainability discourses which can be "read" from the thousands of hectares of strategic plantings of native trees and grasses for salinity mitigation; patches of revegetated and rehabilitated riparian zones: increased connectivity between recent plantings and remnant native vegetation on both public and private land; more humane stock management strategies; zero-tillage cropping practices; reduced water and energy consumption; and from the many other community efforts to reverse environmental degradation and increase native biodiversity. These localised enactments of sustainability stories are being driven from both inside and outside the river's catchment. The exogenous factors include pressures associated with anthropogenic climate change; the Australian government's international obligations under various multilaterial agreements; paradigmatic shifts in conservation biology and related sciences; a heightened appreciation of the conservation value of remnant native vegetation on private property and the role of farmers in managing this; aging and declining rural populations; falling commodity prices; economic globalisation; low farm profitability; the recent long drought or ENSO event; the reduced political influence of traditional rural lobby groups; and the influence of city-based special interest organisations concerned with indigenous rights, animal welfare and environmental degradation. Local factors include the involvement of women and indigenous people in land management decisions, and collective and individual desires to restore the productivity of degraded farms, ensure the long-term viability of rural communities, and retain the moral licence to continue farming in the face of mounting criticism from non-rural constituencies.

Some of the more progressive stories now inspiring change along the Lachlan and its tributaries present twin visions of an all-encompassing "reconciliation" between settler–descendants and indigenous peoples *and* between rural people and native biological communities. These narratives are already being embodied in science-based projects such as Gondwana Link, a collaboration between local and national conservation groups with the support of indigenous communities in south-western Australia, and the Wilderness Society's WildCountry initiative [78] "to protect and restore not just small patches of country, but entire ecosystems, along with the ecological processes that drive and underpin them" across the entire continent [79]. More mainstream sustainability stories include the Wentworth Group of Scientists' Blueprint for a Living Continent which proposes nothing

less than a "true-blue" national eco-agricultural revolution [80]. Landscape conservation and water management strategies outlined in this Blueprint were developed further by the Wentworth Group [81] and have been incorporated into the NSW government's native vegetation reforms [82] now being implemented through Catchment Management Authorities, including the Lachlan CMA.

But competing and much older narratives justifying the continuation of damaging land management practices remain in circulation, as anyone who spends time in inland Australia knows. Some of these old stories were told from the podium of the NSW Farmers Association's Drought Summit<sup>7</sup> in Parkes, a provincial town on the catchment's northern rim, in the winter of 2005, at a time when 87 percent of NSW was drought declared, and Wyangala Dam, the main water storage on the Lachlan, held less than eight percent of its capacity. Two thousand farmers attended this event. An overwhelming majority of them were, like me, of Anglo-Celtic descent and most were grey-haired males in their late 50s and 60s who had spent the last 3–5 years struggling with the psychological and economic stress of severe drought on farms which, from an agricultural economist's point of view, could not be considered economically viable even in good years. These farmers were now asking state and federal authorities to extend drought assistance so they could sow the next season's crops. Yet even as they were seeking financial support from the public purse many were also openly resentful of attempts by government authorities, on behalf of the broader polity, to limit what they saw as their rights as landowners to clear remnant vegetation on their properties: indeed, outgoing Farmers Association President, Mal Peters, publicly joked that some of the farmers in the audience were still "environmentally rearranging a bit of mulga in a positively constructive way" (i.e. clearing native vegetation) despite legislation designed to prevent it. Some of the farmers, including the outgoing President himself, also had doubts about Climate Change: Peters admitted, for example, that he "didn't wear at the moment that Global Warming is factual."8. When climate scientist Roger Stone attempted to warn the Summit about the probability of reduced precipitation and increased evaporation in coming years a heckler shouted at him from the back of the marquee to "go away". Keynote speaker Alan Jones, a charismatic "shock-jock" broadcaster whose radio programs are popular in rural Australia, received a very different response, however. He told his audience stories they wanted to hear, about how "the Bush has looked after this country for hundreds of years"; how the government is "in bed with the Greenies and the Wentworth Group"; and how water that is now "going to waste" in tropical northern Australia should be pumped south to "drought-proof this country", an idea first promoted in the 1930s by engineer John J.C. Bradfield<sup>9</sup> [83]. At the end of Jones' address 2000 farmers rose as one to give him a standing ovation.<sup>10</sup>

As I stubbornly remained seated while those around me stood to clap I reflected upon the longevity of these counter-narratives and the to-me-archaic, even self-destructive assumptions and values they embodied. But I simply had to accept that new stories, new legislation, structural adjustment policies, market-based instruments, even hard scientific evidence of the damaging impacts of current practices are not sufficient, in themselves, to

<sup>&</sup>lt;sup>7</sup>The Drought Summit was held on 17 May 2005 at the Parkes Racecourse.

<sup>&</sup>lt;sup>8</sup>From personal notes taken at the Drought Summit.

<sup>&</sup>lt;sup>9</sup>See the essay by freshwater ecologists Sam Lake and Nick Bond elsewhere in this issue.

<sup>&</sup>lt;sup>10</sup>Personal notes taken at the Summit.

change the way people think and act—because stories must be "believed or accepted" if people are to live them [84]. And we have no way of ensuring belief or acceptance, or even compliance!

# 5. What am I to do?

These many stories of which I "find myself a part" [1] are, of course, set in the past and in the ambiguous timeframe of "the present". But the stories I want to be part of, as coauthor, co-narrator and protagonist, are—for now—set in the *future*. These are truth and reconciliation (T&R) stories in which we settler-descendants have removed our multiple blindfolds and have fully acknowledged the many deliberate and "inadvertent" consequences of past actions on the Wiradjuri and their descendants and on the ecological communities of the inland. In these yet-to-be-enacted T&Rs "the much-touted national dream (the fair go) for all Australian children to share equally in the national bounty" [85] has been fulfilled; and the psychological stresses, injustices, poor health and social exclusion so many Wiradjuri-descendants and other indigenous peoples still experience in the first decade of the 21st century have been acknowledged and ameliorated, although not forgotten. In parallel T&Rs the inland plains my family still farms have been transformed into a WildCountry mosaic of restored native grasslands, woodlands and wetlands interspersed with repli-forests<sup>11</sup> and sheltered eco-agricultural niches<sup>12</sup> [86] for the production of domesticated exotics, including wheat and other cereals, and an increasing range of re-domesticated endemics, such millet (Panicum decompositum) and daisy yams (*Microseris scapigera*), both of which were grown as staples by proto-agriculturalists across much of south eastern Australia long before the British Conquest [87]. We still graze sheep in this possible future, although in limited numbers, but now these exotics must share the native grasses of their agri-niches with semi-wild macropods and bush turkeys, or bustards, native species which are once again being harvested for meat and other products.

In these biopolitical T&Rs I want to be part of farmers do much more than produce food, fibre, pharmaceuticals, timber, biofuel and other eco-commodities, because now they are also highly trained biodiversity stewards paid by their broader society to restore, conserve and maintain the native ecosystems we all still depend on for fresh air and water, wild food, carbon sequestration, pollination, pest control, salinity mitigation, soil fertility, prevention of erosion and nutrient run-off, aesthetic pleasure and spiritual sustenance. Stewardship fees are determined according to a globally recognized biodiversity intactness index [88] and, along with other environmental services payments, account for more than half the annual income of most farm businesses. As a direct consequence of the enactment of these 21st and 22nd century stories the small marsupials which disappeared during my grandparents' watch have been re-introduced and are now flourishing, and the woodland

<sup>&</sup>lt;sup>11</sup>I've coined the term repli-forest (the prefix "repli" is an abbreviation of "replica" or "replicate") for the kind of silva-culture plantations I have in mind, to emphasise the importance of mimicking the mix of canopy, understorey and groundcover species found in healthy native forests, and of minimising damage to native wildlife during timber harvesting. This could be done by "replicating" the fall of mature trees during strong storms, a process which, as I understand it, opens up space for seedlings to reach maturity without destroying the ecological integrity of the forest.

<sup>&</sup>lt;sup>12</sup> I've called these production spaces agri-niches instead of fields or paddocks to signal that they are managed as biologically diverse habitats nested within broader eco-systems, rather than as zones for broadacre monocultural crop production.

birds, brolgas and budgerigars I remember from my own childhood in the 1950s and 1960s have returned in profusion. Hawks, kites and wedge-tailed eagles ride the thermals high above the plains; new generations of once-threatened parrots and owls hatch each year in the hollows of the oldest trees; and at dawn and dusk the air trills with the chatter of small native birds that many of us once feared would be lost forever.

In these same T&Rs I want to be part of—indeed, that I am now part of, as you are, dear reader-the "natural rivers, creeks, streams and associated lagoons, billabongs, lakes, wetlands, paleochannels, floodrunners, effluent streams ... and the floodplains" of Galiyarr, or the Lachlan, are no longer "likely to become extinct in nature", [21, p. 7] because the land and water management strategies which once threatened their survival have been replaced by a suite of holistically regenerative eco-innovations and practices. The entire length of Galivarr's main channel and all its tributaries, from the Breadalbane Plains in the Southern Uplands to the Great Cumbung Swamp in the semi-arid southwest of the state, have been revegetated to something approaching the condition Evans found them in when he vandalised that long-gone riparian eucalypt on 1 June 1815; and once more the water is clear and rippling with a full complement of healthy natives, including large yellow belly, catfish and Murray cod, frogs, diverse invertebrates, and even this continent's aquatic monotreme, the platypus. The extensive wetlands that Surveyor-General John Oxley cursed in 1817 as an impenetrable "morass" [9] have also been returned to something like their precolonial condition after a carefully negotiated settlement between Wiradjuri and nonindigenous landholders enabled local communities to transform degraded floodplain properties into a maze of reconstituted swamps, reed beds and billabongs. These are now wildlife havens, the hatcheries and nurseries for native fish and other aquatic species, the noisy habitats of once-endangered waders and waterfowl, and seasonal feeding grounds for hundreds of thousands, even millions of migratory birds. The wetlands and their wildlife attract thousands of eco-tourists to Galiyarr's floodplains each year, many of whom visit the region specifically to see brolgas performing their iconic dance and to participate in the bi-annual return of the Brolga Festival of Renewal. Locals have reconsecrated the swamps, reedbeds, billabongs and riparian forests to Baiamai, Wawi and other ancestral beings, and once again totemic species are being propitiated in the Wiradjuri language, and honoured with more syncretic rituals through which we locals acknowledge our increasingly "mixed blood" cultural heritages and our mutual interdependency, humans and non-humans, in the mystery of life on Earth.

In these yet-to-be enacted narratives the communities along Galiyarr and its tributaries have re-established old trading links with the regions so many of our forebears emigrated from. Some of Margaret and Donald McInnes's many descendants are now exporting lean green high protein kangaroo meat and pharmaceuticals manufactured from native plants grown in our Lachlan Valley repli-forests to the Western Highlands of Scotland, for example. Other relatives are exporting locally processed eco-wool and premium clean green Lachlan Valley vegetables, such as buk choi, wombok (chinese cabbage), chi qua (hairy melon) and gai lan (Chinese broccoli) to the Cantonese speaking provinces of Southern China, the homelands of the men who first cleared much of the land we have now revegetated, and who grew the fresh fruit and vegetables that sustained our settler–forebears in the 19th and 20th centuries. These southern Chinese provinces are also valuable markets for many of the eco-services and technologies we have developed in our Valley to end our former dependence upon fossil fuels, to further reduce water and energy consumption and to restore damaged ecosystems.

Other locals are shipping value-added eco-ag products to the estuaries of the Indus and Shatt al-Arab for transhipment to the homelands of distant cousins who share the dryland wheat/sheep stories we settler-descendants inherited from the proto-agriculturalists of Catalhöyük and other Southwest Asian societies. Our wheat/sheep trading partners include long-lost distant relatives of the cameleers and hawkers who brought the outside world to my forebears at Boorathumble Station; the families of the many South Asian doctors and other professionals who kept local hospitals and surgeries functioning in the late 20th and early 21st centuries when Australian-born professionals refused to live in the bush; and the relatives of thousands of refugees who escaped war, ethnic or religious persecution, poverty, pestilence and rising sea levels to settle on Australia's inland plains. This new exchange of commodities, services, knowledge and skills is now conducted in Arabic, Persian, Kurdish, Urdu, Hindi, Punjabi, Sindhi, Pashtu, Farsi and Hazara; in a range of Turkic languages; in Tamil and Bengali; in Cantonese, Hakka and Mandarin, and in the many languages of our closer South-east Asian and Pacific neighbours, as well as in English, Gaelic and other European languages. Indeed, in these new biopolitical stories our provincial towns and eco-villages are Babels of diversity, and our built environment is at last reflecting our mixed inheritances, with Wiradjuri keeping places and sacred sites, Humanist and Wiccan memorials, Christian churches, Muslim mosques, Jewish synagogues, and Buddhist, Taoist, Confucian, Sikh, Jain, and Hindu temples and shrines nestling amongst residential and commercial infrastructure and community amenities.

Clearly we inlanders of the future do not subscribe to *all* the same grand narratives, but we share enough beliefs and values to "assume the common we of mutual recognition" [84], as David Carr so nicely describes the inclusive sense of community that is so fundamental to social cohesion, security and well-being. Our rich cultural mix means that ancestral heroes and mythic beings from our many interconnected pasts now inhabit the imaginations of all of us to varying degrees and regularly become the subjects of the literary works, musical compositions and other creative productions through which we celebrate our sense-of-place or belonging, our shared memories and our aspirations for the future. But when we look to the blue dome of sky stretching by day across the inland, or to the moon and the blaze of stars by night, we enact more private, more spiritual stories about who we are, where we have come from, where we are going to, and about our ongoing relationship with the cosmos, and give thanks that we still can.

Ah, such optimistic and polyphonic stories we are co-authoring, these interwoven beginnings-without-endings that are yet to "form the objects of which they speak" [32]. But, I ask you, who wants to be part of a neat linear story that ends with species extinction, hopelessness and human misery? Who wants to live on a river on a plain on a planet without dreams?

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