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EDITORIAL INTRODUCTION

JAMES BEATTIE

Several treats are in store in the second issue of the year. Professor John Andrews reflects on the fascinating interconnections between biology and history, why awareness of history plays a central role in various biological sciences as well as the role of scientists in writing history. Professor Yukiko Numata Bedford then analyses the delicate processes leading up to the construction of the “Peace Gardens”, Featherston, South Wairarapa. The garden has become the site of reconciliation and the coming together of different cultures and not least, a leitmotif of peace and hope for the future.

Two reviews appear in this issue: Dr. Edward D. Melillo considers the recent translation of Joachim Radkau’s thought-provoking Nature and Power: A Global History of the Environment, a new translation of a significant work on world environmental history which provides its reviewer with much food for thought. Chris O’Brien reviews Don Garden’s Droughts, Floods & Cyclones: El Niños that Shaped our Colonial Past, which analyses the impact of ENSO in the South Pacific and provides a model example of the importance of narrative history in reconstructing complex weather events.

Finally, continuing our new section which either introduces a garden or discusses a resource pertinent to New Zealand nature, Geoff Doube and Peter Sergel reflect on the ‘Chinese Scholar’s Garden’, Hamilton Gardens.
Writing history can at times appear to be something of a free-for-all. There is apparently room for everybody from enthusiastic amateurs to those with professional qualifications and experience including, it seems, biologists. Normally those engaged in academic disciplines tend to stick to their knitting, especially as we are in an age of specialisation, encouraged by an increasing growth in the breadth and depth of knowledge, the skills required to absorb it, and the cost of doing these things. But now and again some of us stray outside our core disciplines, the writer included, and I am taking this opportunity to reflect a little on why engagement with history has had its attractions to biologists.

In eighteenth century Europe, it would have been unremarkable for a young man of means who had had the benefit of a classical education and the Grand Tour, to have a passion for collecting butterflies, shells, and stuffed birds, or for stocking an aviary or menagerie.\(^1\) Even in nineteenth century Europe or North America, few people would have deeply pondered the divisions between science and history, as the broad sweep of both subjects, and the eclectic interests of the educated classes, made room for the inclusion of a variety of disciplines in their study and writing. History and the living world were even regarded as the natural provinces of theologians. Natural History – the name itself is suggestive – later became the classless preoccupation or hobby of a wide range of people in Victorian times.

However, even while all this was taking place, developments in the life sciences were beginning to cause its fragmentation into now familiar sub-disciplines. Divisions prescribed by Linnaean classification enabled parts of the living world to be studied separately and exclusively. The medicinal and economic uses of plants, aided by exploration and discovery,
encouraged the science of botany. Comparative anatomy enthused zoologists. After Darwin, evolution and genetics emerged as separate fields and towards the end of the nineteenth century ecology started on its path towards a distinct science. History, which once included just about everything that created change in its wake, modified its content with the times, with new currents and streams emerging as separate areas of study. Thus, today, we have concentration on areas as diverse as military, theological, and political history, national histories and different time periods – rather than the world from the beginning. A great event, such as the French Revolution, could provide a scholar with work for a lifetime. The growth of science itself became of interest to historians (this is something we will come back to).

It can be argued that the increasing divisions of scholarship, and consequent specialisation by its participants, diminished the possibilities for communication across the broad reaches of knowledge. This process was enhanced by the restrictive divisions of educational curricula, the development of specialist research institutions, and the arts/science divide followed by the academic departments of universities. Like secret societies, the specialisations developed modes of expression and neologisms that proved impenetrable to the uninitiated. Therefore the climate for interdisciplinary study did not appear propitious. But as we will see, the complexity and interrelationships of the social, biological, and physical world demanded that in some areas the barriers between disciplines should be breached. That this happened sooner rather than later can be seen in the biological and social implications of Darwinism, the rise of ecology, and concern for nature that brought biologists closer to needing to understand the human role in the natural world – and for historians to understand how these revelations were affecting society. Despite religious belief and their classification as sentient social beings with a sophisticated culture, humans were increasingly regarded as part of Nature rather than separate from it. The post-war growth of environmental movements and thinking, along with human population and climate crises, raised the awareness of biologists to areas outside their laboratories and study sites, bringing a wider range of people in touch with ecology – just as natural history had drawn in people from all walks of life in the nineteenth century. The twentieth century rush to study the environment inevitably drew historians and geographers into the
vortex. Environmental history became another area of specialisation.

This is enough by way of general background, the rest of this paper is devoted to looking further into the matter from the standpoint of a biologist – one who has made his own incursions into history – with a look at some others who have done the same.

**Biology and history, and history of science**

Why do biologists engage with history? Each is a separate discipline with its own traditions, literature, debates and rules. Each has discussions about what is important within the discipline and the ways in which it should be studied. Points of contact, on the face of it, appear relatively few. The practitioners are found in separate faculties – often in separate buildings or institutions. However, as we will see shortly, whole areas of biology are dependant on knowledge of what happened in the past. One of the first things a student learns is the life history of an animal or plant – the changes and successive stages that mark its development. We will come later to other examples, but to provide a context for these it might be useful to probe a little further into the division between the history of science and history in science – which are different things although both have to do with understanding past events.

The history of science is generally the history of the development and changes within science itself, which is often related to the more general social and intellectual histories of societies and cultures. A New Zealand example is Charles Flemings’s *Science, Settlers and Scholars*, an institutional history centred on the history of the Royal Society of New Zealand, but which touches on many aspects of the development of science in this country and its personalities. In biology, this sort of enquiry might look at how the discipline has been to a degree a cultural and social product derived from political, institutional, public, and private interests. *Discovering Birds, the Emergence of Ornithology*

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as a Scientific Discipline, 1760-1850\textsuperscript{3} by P.L. Farber is such a work. *Our Islands, Our Selves, A History of Conservation in New Zealand*,\textsuperscript{4} by David Young, is as much about something that is political, cultural and social in nature as it is about a science. The biographies of scientists fit in here as well as they include not only the scientific achievements of their subjects, but also the social context within which they worked. Examples by New Zealand authors include Michael Hoare’s *The Tactless Philosopher, Johann Reinhold Forster (1729-1798)*\textsuperscript{5} and Ross Galbreath’s *Walter Buller, the Reluctant Conservationist*.\textsuperscript{6} Two of the authors in the above examples – Fleming and Galbreath – are, or were, biologists, although Fleming was also a distinguished geologist whose biography was written by Mary McEwen, an ecologist.\textsuperscript{7}

**Approaches to history in science**

History in science, we can say, is where certain elements within the discipline lend themselves to historical investigation as a necessary part of understanding it – such as the layering and ageing of geological strata, the ancient movements of tectonic plates, and the origins and distribution of flora and fauna. Such studies do not necessarily have much in the way of linkage to human concerns and behaviour, particularly as so much took place in deep history before humans evolved and history was recorded. Certain sciences lend themselves to these sorts of enquiry – biology and geology more so than, say, chemistry or most branches of physics.

Looking more closely at biology, there are several areas that investigate the past in order to find explanations for what we


see in animal and plant species and the environment, and some of these studies find connections with human history. We will look at some examples, drawn from biosystematics, biogeography, evolution, biological anthropology, ecology and environmental studies, and the epidemiology of disease.

Biosystematics is the description, naming and classification of species and the determination of the relationships between them. It is as old as the study of biology itself and achieved the basis of its present framework in the later eighteenth century. It involves the construction of phylogenies which are like family trees in which links are drawn through existing species to primitive and ancestral species, using fossils or other evidence. DNA technologies have revolutionised this field, although morphometric and palaeontological approaches are still important. Using trees, the likely evolution of a species can be determined as a result of mathematical testing of alternative branchings, which may be able to be dated using the likely rate of evolution according to molecular clocks, or the use of geological strata in the case of fossil material.

The story pieced together in this way can be fleshed out by biogeography (which we will come to shortly). In the case of archaeology, through its examination of artefacts, adds to the biological and palaeontological evidence to provide a more complete picture of human development. Extrapolations from current human behaviours can also help interpretation of the past.

More conventional social and cultural history can also lend a helping hand to biosystematics. A number of species that form current Western knowledge base were collected by expeditions such as those of James Cook in the eighteenth century, and ultimately described and named using Linnaean classification. Twentieth century biologists tracking down this material frequently had to trawl through expedition records, diaries, correspondence paintings and sketches in order to correctly identify an animal or plant. In a number of cases, the relevant species might have subsequently become extinct, leaving no other record than a drawing or a few lines of description – and the type or original specimen having decayed in a poorly curated museum collection, or somehow been lost.
P.J.P. Whitehead's *Forty Drawings of Fishes*\(^8\) is a sumptuous, large format publication of the British Museum of Natural History where many of the records made by Cook's naturalists are kept, including paintings by the expedition artists. Whitehead and his museum colleagues revealed that illustrations of birds, fish, and plants by Sydney Parkinson and George Forster had a value to science in addition to their artistic merits and significance to the social and historical record. We even talk about some of these paintings as iconotypes where the physical specimen on which the name and description was based has been lost. Short written descriptions made by the naturalist Daniel Solander and others, provided valuable clues to the original location of voyage species. Whitehead and his colleagues became authorities on the naturalists of the late eighteenth century, the expeditions they were a part of, and the museums developed to house these and other collections.\(^9\)

Biogeography is the study of the distribution of plants and animals. It is closely connected with biosystematics and phylogenetics, as well as the earth sciences, depending as it does on the presence of natural barriers, such as oceans and mountain ranges, as well as plate tectonics, and palaeontology. A relevant New Zealand work is the *Ghosts of Gondwana* by G.W. Gibbs\(^{10}\) that goes back into deep time to describe the origins of this country's flora and fauna. Biogeography, palaeontology, and biosystematics were fundamental to evolutionary theory espoused by Charles Darwin and Alfred Russell Wallace and their predecessors.

Evolution as a discipline studies change in species over time revealed by variations in morphology, the development of reproductive and other barriers, as well as genetic changes observed by molecular techniques. Evolution by natural selection,

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\(^8\) Whitehead, P.J.P. 1968. *Forty drawings of fishes made by the artists who accompanied Captain Cook on his voyages to the Pacific 1768-71, 1772-75, 1776-80, some being used by authors in the description of new species.* British Museum (Natural History). London.

\(^9\) Other biologists include A. Wheeler (ichthyology), A. Lysaght (ornithology), and W. Stearn (botany).

proposed by Charles Darwin in his *On the Origin of Species*, was a theory that had impacts across the social spectrum, which ultimately produced a flood of historical writing devoted to the man and his ideas. The implications of the theory for human society, its beliefs and development were profound and penetrated virtually every field of scholarship.

Biological anthropologists have also been examining human evolution and dispersal, initially through the study of fossil material, supported by archaeological findings. The study of present day populations, including the development and distribution of languages, has also played an important part. In recent decades findings from these sources have been linked to evidence from molecular genetics – particularly mDNA and Y-chromosome studies – throwing much light on the origins and dispersals of modern humans. Of particular interest in New Zealand have been findings related to the origins and dispersal of Polynesians who were ancestral to Māori. Estimates of Māori arrival in New Zealand have been confirmed by dating the bones of rats (kiore) that accompanied the early voyages. Here we can see biological knowledge and techniques assisting in the explanation of events in human history.

Ecology and environmental studies are two further areas that, while often treated separately, overlap in several ways. Ecology has widened its scope to include humans as part of nature and has acquired cultural and social dimensions that are explored in subjects like environmental studies, a multidisciplinary field which includes environmental history. Environmental history is important when we look to past records of environmental change through climate and other physical phenomena such as sea-level rise, plate tectonics, and meteorite impacts. Change in the physical environment can lead to extinctions and redistributions of species and to the emergence of new ones. Environmental history has also a human dimension through its examination of the human exploitation of natural resources, disease, pollution, the translocation of species, and environmental modification, destruction and restoration, all requiring some reference to the political, economic and social factors that underwrite human

activities. Human colonisation itself is of biological and historical interest, both in the biological sense of human dispersal, and the socio-cultural sense of occupying the territory of other people and invading new environments. It is no surprise that ecology and the environment invite attention from a range of disciplines, including biology, medicine, history, geography, anthropology, law, and others.

This is illustrated by a couple of books that come to hand: one called *Ecology and Empire: The environmental history of settler societies*; the other, *Environmental Histories of New Zealand*. In the first book, of the 16 contributing authors, only one, Tim Flannery, is a biologist, the rest are drawn from the departments of History and Geography of various institutions. Similar comments apply to the *Environmental Histories of New Zealand*, where an agriculturalist, a botanist, and an anthropologist, were three scientists among 18 or so contributors. This is not a cause for concern, and there is no law that says that the balance between the recorders of human agency and biological process should be even. The authorship of these books tells us that there are broad zones of interaction between disciplines that defy the pigeonholing of scholarly enquiry referred to earlier.

On the other hand, just about all books on species introductions to New Zealand contain significant historical material, although written primarily by biologists. New Zealand’s island nature and compact and rapid history of human occupation make it a significant exemplar in the world of alien species introductions and native species translocations. It is worth noting that the history of these contains significant socio-cultural, as well as biological, content.

The epidemiology of disease has played a significant part in human history, one where environmental change and movements of human populations have led to disease spread and epidemics, sometimes of great severity. The impact of disease on immunologically naïve populations has particular importance in the wide debate on the effects of colonisers on the colonised.

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Disease epidemiology has received attention from biologists (including entomologists, parasitologists, microbiologists, and ecologists), geographers, historians and medical scientists.

To summarize: The point of bringing these things to the reader’s attention is that it explains why many biologists are used to thinking about the past and that in a number of instances connections can be drawn to human activity or social history, attracting some biologists to more conventional historical themes.

**Biologists writing history**

Having established some of the connections between biology and history we will briefly examine a selection of biologists who have ventured into history writing. We can start with two, both Americans, who achieved international reputations for their popular or semi-popular writing which contained historical as well as biological themes. Stephen Jay Gould, who died in 2002, was an evolutionary biologist and a prolific writer and essayist in areas of science, history and society, as seen in *The Mismeasure of Man*,14 *An Urchin in the Storm*,15 *Leonardo’s Mountain of Clams and the Diet of Worms*,16 and *The Lying Stones of Marrakesh*.17

In a similar vein is Jared Diamond, a medical physiologist who developed interests in ornithology, evolutionary biology and human history. His *Guns, Germs and Steel*,18 ‘a short history about everything and everybody’, was admired or criticised in equal measures by scholars across the board. Forms of determinism as explanations for historical phenomena often find short shrift and in this case agricultural and geographical determinism as explanations for perceived western superiority were bound to be controversial. It was no surprise to find Jared Diamond given

critical attention in *Eight Eurocentric Historians*, by M Blaut, a critique that, according to one reviewer, had problems with its own assertions and generalisations.\(^{19}\)

Coming closer to home, Australian biologists and environmentalists Tim Flannery and George Seddon, come to mind. Flannery’s *The Future Eaters* – the adaptation of people to life and environment in Australia and New Zealand – became something of a classic.\(^{21}\) George Seddon studied geology but became an ecologist and environmentalist, exploring the idea of a sense of place in relation to an environment he was familiar with in Western Australia. He regarded the process of Euro-Australians learning to know and love their country’s flora and fauna, movement towards ‘an imaginative possession of their environment’. He explored these themes in his books, *Sense of Place*\(^{22}\) and *The Old Country*.\(^{23}\) Another biologist, Tim Low, wrote *Feral Future*,\(^{24}\) a popular account of alien species introductions to Australia that contains much historical material.

In New Zealand, Herbert Guthrie-Smith was a self-taught naturalist, with a particular bent for ornithology. He published widely in this field, but is best known for *Tutira – The Story of a New Zealand Sheep Station*.\(^{25}\) In this book, he describes the geological, human and natural history of the place he turned into a productive farm after years of struggle, throughout which he observed the comings and goings of the plants and animals – native and alien – that lived there. It is a fine work that documented changes that were widespread in New Zealand as a result of European occupation, and over which he voiced his

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profound regret. It was published shortly before another significant work, that of the biologist G.M. Thomson, whose *The Naturalisation of Animals and Plants in New Zealand* provided a valuable historical record and commentary that underscored many of the points that Guthrie Smith was making.

A natural heir to these earlier writers was the late Geoff Park, a botanist and ecologist, who began with the Department of Conservation and latterly worked for Te Papa Tongarewa/The National Museum of New Zealand, and in the Waitangi sector. Early in his career, Park became interested in landscapes and their history. This culminated in *Ngā Uruora, The Groves of Life*, part-journal, part history and part admonishment but also a personal odyssey through the scant remains of New Zealand’s lowland forests during which its author recalls their botanical and human history. In the process Park rebukes the European for careless, unthinking use of the land and the destruction of lowland ecosystems in exchange for dairy farms, depriving the indigenous people of their food sources and heritage. Published 46 years after Aldo Leopold’s *A Sand County Almanac* – an American environmental classic – it struck a similar chord with its readers in its ecological references and trenchant criticism of the country’s European occupants. From the same stable (also originally from the Department of Conservation) is Philip Simpson, a plant systematist and ecologist, whose writings on major New Zealand tree species contain many historical references. Being ecologists, both of these writers were aware of the connections between human cultural and social history, ecology and the environment.

Ross Galbreath began as an entomologist but completed the crossover into history with a series of notable publications including *Walter Buller, The Reluctant Conservationist* and

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Working for Wildlife, a history of the Wildlife Division of the Department of Internal Affairs. The botanist, Bruce Sampson gave us Early New Zealand Botanical Art, and aspects of New Zealand ornithological history were touched on by Charles Fleming in George Edward Lodge, The Unpublished New Zealand Bird Paintings. A number of other examples exist in the periodical literature.

One conclusion that might be drawn from this list is that many of the authors had links to ecology, environmental studies and biosystematics, disciplines that – as we have seen – lend themselves to historical investigation. We can also see a tendency to the writing of popular or semi-popular works, aimed at a wider audience than just academic historians and biologists. Another conclusion that might be reached is that most of those biologists in New Zealand who engage with history did so as a reflection of something of a deficit in our understanding of the history of science in this country, particularly in mainstream historical teaching and research, although this is a situation that has changed to some degree.

My own interests in biology and history began with a mimeographed work compiled by lecturers and students in the Zoology Department, Victoria University. Called The First Century of New Zealand Zoology 1769 – 1868, it consisted for the most part, of extracts from the records of expedition naturalists who collected in the period covered by the title. Restricted by scope and distribution, the work suggested a need for a more ambitious undertaking, looking at a longer period in greater detail. At about the same time I encountered Peter Whitehead’s Forty Drawings of Fishes referred to above, which made great use of previously

unpublished drawings by artists who accompanied Captain Cook on his voyages to the Pacific. The format and content suggested by these two works led to my writing *The Southern Ark, Zoological Discovery in New Zealand, 1769-1900*. Material from the archives and collections of libraries and museums in Britain, France, Australia and New Zealand provided a picture of how New Zealand animals were collected and studied, as well as something of the social and cultural context in which this took place.

For example, to properly understand the type location of the South Island brown kiwi – the first kiwi to be described – we need to look at the New South Wales shipping and trading records, the peregrinations of a bibulous sea captain, obtain a glimpse into sealing on the New Zealand coast, examine museum gift registries and records in the Earl of Derby’s library, and the labels attached to bird skins in the Liverpool Museum. One of the interesting things to emerge from this is that the type locality of the original specimen is not as clear as was once believed. It may have been Dusky Sound is sometimes claimed, but it could equally have been elsewhere on the southwestern coast of the South Island or Stewart Island. One thing that stood out from the research that went into this book was the degree to which interest in New Zealand and its fauna was not solely that of the imperial centres, but was spread right across Europe, from the times of the earliest zoological discoveries. For example, shells from New Zealand were first described by German conchologists in an eighteenth century periodical, and New Zealand insects were first described in a publication from a Danish entomologist in the late eighteenth and early nineteenth centuries.

The ideas behind “sense of place” and its biological and cultural outcomes were among several things that led to my next book. When the historian J.C. Beaglehole wrote his *New Zealand: A Short History* (1936), he claimed that unlike Māori, European New Zealander lacked a *genius loci*, a ‘tenderness of place’ or identity with the land they occupied. My question, sixty years later, was “have we now achieved this state, and if it is both a biological and a cultural process, what were the starting points

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and what steps have we taken to achieve it?” The book that endeavoured to answer this and related questions was *No Other Home Than This, A History of European New Zealanders*.\(^3^{7}\) It attempts to record cultural as well as physical and biological change, conjoint processes that can be said to result in a developing sense of place. In parts of the farmed country “the place” that was created bears a strong resemblance to the old agricultural landscapes of Europe. They had – inevitably, given the agricultural imperative – created elements of the landscape that they had left behind, joined at the hip, so to speak, by what remains of the indigenous landscape. In spite of on-going environmental challenges, this duality of landscape and the things that inhabit it is what we may have become accustomed to and fond of, and within which we may have learned to be creative in ways that have a character different from many people’s European forbears. I have been unrepentant about including a measure of human and European history in the book to reinforce the idea that Europeans did not engage the New Zealand environment in a cultural vacuum, but arrived with a complete biological and cultural package that determined their future behaviour here, and left European traces in the landscape and culture – as well as impacts on Māori – that survive to this day.

There is a certain amount of discomfort, for a scientist, in trying to grapple with an amorphous concept like “sense of place”. How do you measure it – if it is measurable at all? How do you line it up with a science like ecology, and track it with the creative endeavours of poets and landscape painters? How is the concept seen in relation to the more awkward one of national identity? That there are difficulties there is no doubt, but the comprehensive written record that has accompanied European colonisation, and the visual evidence of the landscape itself, can at least provide a foundation for the conclusions that have been drawn. Even conclusions have their problems when we are talking of a work that is still in progress, a landscape, both cultural and physical, that is still changing, even though, in the case of the physical landscape, the pendulum of change is not swinging quite as widely and as rapidly as it used to.

Conclusion
To conclude, what this article tells us is that biologists have disciplinary incentives to engage in historical writing, while for some, this need has extended to the writing of history itself. I will leave the last word to David Young, who in his tribute to Geoff Park, published in this journal, referred to Geoff’s love of ecology and history, and he wondered why, ‘this dualism did not occur more often. After all both are sprawling disciplines preoccupied with understanding the context of relationships and communities.’

Sixty-eight cherry trees are in full bloom each year in mid-September at the Japanese Memorial Gardens near Featherston, South Wairarapa (New Zealand). The trees have grown so strongly that blooming branches are even touching each other. People call the place the Peace Gardens. This is a story of a particular struggle, the struggle of people trying to overcome cultural differences through grassroots efforts. What is known as the “Featherston Incident” broke out at the Prisoner of War (POW) camp on 25 February, 1943, during World War Two. The people of Featherston were deeply affected by this wartime tragedy, which led to the deaths of many soldiers. Decades later, the site now stands for many as a proud symbol of reconciliation achieved through tolerance, understanding and acceptance.

James Nachtwey, American war photographer, in a recent televised interview, pondered that we humans are still using the most primitive method – war – as a means of overcoming differences. But he believes that his war photographs would have the power to eventually help bring world peace. In his review of Michiharu Shinya’s book, Beyond Death and Dishonor: One Japanese at War in New Zealand, Vincent O’Sullivan, New Zealand writer, playwright and critic, pointed out that ‘No one who survived the Japanese and their camps in World War Two had much reason not to loathe them... It is a difficult story to forget, and to concede that there may be another side’.

The Featherston incident
The Prisoner of War (POW) camp was located at Tauherenikau, 2km east of Featherston along State Highway 2. Previously, it was the site of the largest military training camp in New Zealand established during World War One. More than 40,000 men were
trained there before being sent to the battle fronts. At the request of the United States military, the site was re-established as an internment camp for Japanese POWs in 1942.

Widespread fears prevailed in New Zealand at that time that the Japanese might invade New Zealand. In 1942-1943, a total of 868 Japanese soldiers and paramilitary personnel taken prisoner in the South Pacific (mainly in Guadalcanal) were interned at the camp. The earlier arrivals were mostly paramilitary personnel drafted into the Japanese navy. Later, captured or injured military personnel were also interned in the camp.

Accounts leading up to the incident, as well as details of the incident itself and its aftermath are by no means clear. It is generally agreed that the paramilitary personnel in general accepted life at the camp. On the other hand, it is assumed that some military personnel strongly felt it was disgraceful to be captured alive and to have to work for the enemy. On 25 February, 1943, some 240 soldiers staged sit-down strike and refused to do the assigned work. They demanded a chance to meet with the camp commandant, but to no avail. Negotiations on work at the camp had been going on, but the soldiers seemed to have felt that their demand was not seriously taken up and the negotiations had come to a deadlock. The camp commandant instructed the camp adjutant to order them back to work.

It is not clear the sequence of what happened next, but it is believed that the camp adjutant’s shot wounded Lieutenant Adachi, who was the negotiator for the group. The unarmed soldiers tried to charge, with stones. Spontaneous firing of rifles and sub-machine guns by the guards started. There was no order to shoot. The firing continued for some 30 seconds, only to stop at a third order to cease firing. A total of 68 Japanese lost their lives – 31 died instantly, 17 soon later, and 20 more died within a month in hospital. Those 20 were among 74 men who were injured. On the New Zealand side, a ricochet killed a New Zealander, Private Walter Pelvin, and six others were wounded. According to the investigation performed immediately after the incident, the firing by the guards and the attack by the Japanese POWs with stones started simultaneously.

One of the factors which seems to have led to the soldiers’ discontent was that, although the Japanese government signed the Third Geneva Convention adopted in 1929 dealing with the
treatment of prisoners of war, it did not ratify it. Thus Japanese military personnel were not aware of that international agreement. Also, both sides might have been working on different assumptions, lacking a common language or culture.

**Cultural differences**

Wartime secrecy came to be gradually lifted in the 1950s, and there were many different interpretations and accounts of what had led to the massacre at the camp. Although a military court exonerated New Zealand, it made it clear that cultural differences played a role. In his play, which revolved around the theme of cross-cultural conflict, O’Sullivan was one of the first New Zealanders who came to interpret the incident as cultural conflict between east and west along with an Australian, Charlotte Car-Gregg. Mike Nicolaidi, in his work, *The Featherson Chronicles: A Legacy of War,* has made it clear by painstakingly combing through the official documents that there was no revolt before the shooting. Despite all those findings, there lingered emotional animosity toward Japanese among New Zealanders.

It could be assumed that the animosity arose not just from the incident itself, but it had grown from the experiences and assumptions of New Zealand soldiers about Japanese on the war front and in Japanese POW camps. We find, concluding his review of the above-mentioned Shinya’s *Beyond Death and Dishonour,* O’Sullivan as saying:

> His [former POW, Adachi's] long campaign to establish a memorial garden near Featherston ...was snookered even quite recently by the RSA. A great pity. The proposed “peace garden” would not for a moment have let the Japanese off the hook for their wartime atrocities. But it would have conceded how the facts of the future are now in other hands.

The idea of establishing something at the site of the former POW camp, which would keep alive the memory of the unfortunate wartime incident in the hope of realising a peaceful world, had been afoot for some time since the 1970s, when the

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4 “Mutiny, protest or snafu?” *Listener,* October 6, 1979
5 (Harper Collins Publishers, 1999)
first group of former POWs revisited Featherston. Official envoys from the Japanese government had already visited Featherston on several occasions. Certainly there were people of goodwill working toward reconciliation in Featherston, but the rather unhappy feelings of the townspeople in general toward Japanese had not been overcome. Clearly, there was a need for both sides to come closer and have deeper contact in order to understand each other's cultural differences as well as commonalities. The lack of a common language may have been a great barrier, but not necessarily an insurmountable one, as will become clear later in this paper. The task to reach mutual understanding and reconciliation seemed insurmountable on both sides.

**The beginning of reconciliation**

In the mid-1970s, a small rest area was created at the suggestion of the neighbouring Greytown Returned Service Association (RSA) to erect a sign to inform people of the site of World War One camp. Funds were raised to purchase the land, and the area was
dedicated by the Greytown RSA to all who had trained at the camp. The commemorative plaque states:

Featherston Military Camp W.W.I. officially opened 26.1.1916. One time 5th busiest Post Office in N. Z. This area immediately opposite the main camp entrance was known as Canvas Town. It served for a “Hardening Up” process and departure point prior to the inevitable Rimutaka Route March and final embarkation. This camp was the last New Zealand home for thousands of W.W.I. soldiers.

Many other memorial plaques are also found there. There is one donated by the New Zealand American Association, and another by the Belgians: ‘Donated by the Belgian people in gratitude to NZ servicemen who were the first to liberate Messines in World War One.’

A plaque carrying a seventeenth century haiku by Basho in Japanese and with translation was donated by K.J. Nysse of Batavian Rubber Company in 1979:

\[
\begin{align*}
\text{Behold the summer grass} \\
\text{All that remains of the dreams of warriors.}
\end{align*}
\]

A plaque from the Japanese Embassy simply reads: ‘In memory of 68 servicemen who died here in World War Two.’

Two Japanese characters with English translation are engraved on a plaque dedicated by some of the campmates of the Japanese POWs: Chin Kon (Repose of Souls). The plaque was placed in the rest area when it was established in the mid-'70s. It is noted that the original plaque engraving seemed to have had an English translation below the Japanese words, but the English had been scratched out, perhaps most likely by vandals. On a more recent visit in 2008, however, it was a pleasant surprise to find the English inscription back in place.

In the meantime, some of the former POWs expressed a desire to establish a “peace garden” where graves of the dead soldiers would be erected together with other amenities suitable for a garden. Adjacent to the extant memorial rest area, a piece of land was purchased by a donation from Japan. It was a difficult decision to make for the South Wairarapa District Council; the
The plan was met with strong opposition by the Featherston RSA. The council accepted the opposition respecting the feelings of the veterans. The proposal was left pending for some years.

**The Memorial Park and the Chor-Farmer**

A ray of hope breaking the deadlock came about in 2000, by a concert visit of the Chor-Farmer, a group of amateur male-voice singers from Japan. They staged an evening concert at the ANZAC Hall, which was used as an emergency field hospital at the time of the shooting incident in 1943. The Chor-Farmer proved to be an instant success, receiving a standing ovation. (*Chor* is the German word for choir.) Music provided a common language. This was the first time Featherston had ever experienced close physical and cultural contact with so many non-military, ‘ordinary’ Japanese since the war. Prior to their visit and overnight stay in town, people were not completely convinced about the amateur Japanese singers’ visit to Featherston. But by the time the group left town, people felt the atmosphere of the town was changing.

![Image of Japanese Memorial Gardens](image)

Figure 2: Sixty-eight cherry trees are ready to bloom at the Japanese Memorial Gardens

Almost miraculously, the singing voices of the Chor-Farmer seemed to have worked as a catalyst to break the deadlock at the District Council concerning the establishment of Japanese
memorial peace gardens. The issue came to be deliberated again at the council. Debate continued for several months. In the end, when the term ‘peace’ was dropped, the opposition reluctantly accepted the creation of ‘a garden’ alongside the existing rest area.\(^6\) The President of the Featherston RSA is reported as saying that there were just a few RSA members opposed to the garden: ‘Some are dead against it, some don’t mind it, and some are for it.’\(^7\)

The passing of the controversial proposal at the Council would indicate that the majority of the councillors were understanding and accepting of the plan.

The pace of creating a Japanese memorial garden quickened. It was completed in July, 2001. Sixty-eight cherry trees were planted by volunteer townspeople, in straight rows appropriate for soldiers on duty, to commemorate the sixty-eight victims of the Featherston Incident. The day after cherry trees were planted, vandals uprooted some 40 plants, but they were quickly replanted and luckily survived. Nearly ten years after the planting, the cherry trees have grown, and branches come to touch each other, as if shaking hands in friendship. In the cherry blossom season, they attract many Japanese and other visitors. Despite the official name having to drop the word ‘peace’, people keep calling the garden “Peace Gardens”. Certainly the desire for peace is ubiquitous.

**Foreign culture: experiences of the Chor-Farmer**

The great success of the concert, however, was a hard-won result brought about by the goodwill of many people, including New Zealanders, Australians and Japanese New Zealanders. And most notably it was a result of a trial and error struggle of the Chor-Farmer’s to understand different cultures gained through their repeated overseas tours with Conductor Masumoto at the helm.

It was more than 40 years since the choir group was organised by Hiroshi Masumoto, now conductor and composer, in 1967. It began as an extra-curricular chorus group, with only three members, at the Tokyo University of Agriculture. Asked why he organized the group, he mused that he thought a university of agriculture would need more culture on campus.


\(^7\) *Wairarapa Times-Age* Monday July 9. 2001
involvement with culture seems to be continuing in a different way even now.

Masumoto majored in forestry, but went on to study conducting and music composition professionally after graduation. He has been with the group as a leader, directing them for more than 40 years. Although the choir members are non-professionals, the group has received numerous top prizes in music competitions in Japan. The 30-odd members, conductor Masumoto included, all belong to the post-World War Two generation, and naturally have no direct experiences or memories concerning the war. At present, the members are mostly graduates actively working in business, but even now a few are student members. Their concert schedule includes regular domestic concerts a few times per year in addition to the biannual overseas concert tours. The overseas tours are done on a strictly voluntary basis.

Figure 3: Chor-Farmer singers performing in front of the New Zealand soldiers’ memorial

On the occasion of their 10th anniversary, they initiated an overseas concert tour. Although their initial choice was Australia8 it was only by chance. However, they were aware of Cowra, a POW camp site in Australia where on 5 August, 1944, 1100 Japanese prisoners of war attempted a break-out. Approximately 378 Japanese prisoners escaped outright, 234 Japanese and 5 Australians died, 331 escaped for the period up to nine days. It was the biggest such escape in Australian history. The Chor-Farmer members were quite young, all under 30, and had no

8 Korea was chosen first in August, 1974, but an unexpected political turmoil (the assassination of Mrs. Yuk Young-soo, wife of President Park Chung-hee) forced them to cancel the plan.
wartime experience. Although they toured and performed in several cities each time, and they were welcomed cordially, it was felt that repeated visits would be necessary to gain even some degree of trust among their Australian hosts, unaccustomed to such visits. New Zealand was added in their itinerary in 1981.

In 2010, they successfully completed their 17th tour, of what is now called the Goodwill concert tour. They came to feel that their overseas tours would be meaningless unless grass-roots understanding were achieved between different cultures. Home stay became the rule. Through close contact and communication, the Chor-Farmer members gradually learned to think from the viewpoints of the other cultures, to put themselves so to speak in their shoes. For instance, their concert repertoire includes various genres: Western classic ballads and airs familiar to the audience as well as Japanese songs. Hymns are also an important repertoire, although the members are not Christians; they have found the strength of hymns in multicultural communication. Popular native songs of the country they visit are also powerful. At the end of a concert, spontaneous chorus of native songs with the audience would inevitably follow.

On the occasion of both Cowra, Australia, and Featherston becoming twin-cities in 1998, the Chor-Farmer came to learn about the tragedy at Featherston for the first time, although they had been visiting New Zealand since 1981. In 2000, after accepting an invitation to visit they immediately included Featherston in their itinerary. The above-mentioned first visit to Featherston in 2000 was thus realised. Based on the long years of experience gained through trial and error elsewhere in Australia and New Zealand, the preparations were made carefully in accordance with what they thought were the needs of the situation.

A visit to the memorial rest area was high on the list of priorities. Once at the site, visits to New Zealanders’ memorials came before those of the Japanese. Earlier, they did not realize the importance of the visits to the graves of the dead Australian soldiers in Cowra, although they visited those of the Japanese until, after about ten years of close contacts, an Australian suggested the visit to the Australian graves. At Featherston, they sang impromptu Po Karekare Ana, New Zealand’s “second national anthem” with the audience to conclude the programme. As their concert tours are repeated every second year at Featherston, the
quality of communication gradually improved. The town paper, the Phoenix and the local newspaper, the Wairarapa Times-Age, began to run articles on the visits of the Chor-Farmer. Not only the local people, but also people from outside Featherston are now regular audience members. Although the group was not able to secure home stays on the first visit, from their second visit, the members were cordially welcomed by the townspeople at their home, which provided opportunities for further deepening mutual understanding.

The Chor-Farmer’s visits also inspired the people of Featherston. In 2006, on their fourth visit to Featherston, the Chor-Farmer members were surprised to be greeted by a newly organized local male-voice choir, Gentlemen Singers. Motivated by the presence of the Chor-Farmer, those interested in chorus decided to emulate them, but they were careful to keep it a secret until the arrival of the group. Townspeople were also happy to see the two groups performing together, inspiring each other. Further, in 2007, a local initiative raised funds to donate a concert grand piano to the ANZAC Hall. The hall was not equipped with a decent piano, and providing one had been a problem. The project turned out to be a collaborative work also. A piano was selected in Japan by Conductor Masumoto and Pianist Ms Masako Yuyama. Through their efforts, the ANZAC Hall is now adorned with a beautiful, and high quality, grand piano. When introduced to the new piano for the first time at the ANZAC Hall, Conductor Matsumoto, Pianist Ms Yuyama and all the singers of the Chor-Farmer were deeply
touched and delighted by the scrupulous and loving maintenance of the piano at the ANZAC Hall. Now the ANZAC hall attracts renowned professional pianists such as Michael Houstoun.

Conclusion
At home in Japan, there is much serious activity devoted to trying to bring about reconciliation with Australia and New Zealand. The Chor-Farmer members join memorial ceremonies and dedicate their chorus to the annual ANZAC Day ceremony, paying their respects to the military personnel and others entombed at the Yokohama War Cemetery in Hodogaya-ku, Yokohama. The cemetery, established by the Japanese government in 1946, is permanently leased to the London-based Commonwealth War Graves Commission. A total of 1873 war dead is buried, including Americans and Dutch, and an unknown number of soldiers numbering 335 in all. The Chor-Farmer also makes regular pilgrimages to the memorial peace garden in Naoetsu, Niigata, a port on the Sea of Japan, where an Australian POW camp stood during World War Two. Sixty Australian POWs died from heavy labour, hunger and cold. After the war, eight Japanese guards were sentenced to death at the military court. Epitaphs are erected for the Australians and the Japanese, respectively, in the memorial park created in 1996.

The Chor-Farmer led by Conductor Hiroshi Masumoto, is now a big tree grown from a little acorn. But through their overseas experiences, they have come to strongly realise that the unfortunate experiences of the war must not be forgotten, and the memories must be handed down for generations to come. In this sense, people might call their goodwill tours a pilgrimage. In any case, long and arduous roads still lie ahead. Let us hope that at least the roads will be lined with cherry trees, sometimes bare, but sometimes in full bloom, with peaceful rest areas on the way.
**Appendix: A Brief Chronology of the Australia-New Zealand Goodwill Tour by the Chor-Farmer**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1967</td>
<td>Birth of the Chor-Farmer: Three volunteer students established a male chorus group at Tokyo University of Agriculture, Mr. Hiroshi Masumoto as leader/Christmas concert</td>
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<tr>
<td>1968</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; regular concert Annual regular concerts and many others continue to be held in Japan to date</td>
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<tr>
<td>1974</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; overseas concert tour, to Korea, was organised, but forced to cancel the plan due to an unexpected political unrest in Korea</td>
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<tr>
<td>1977</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; overseas concert tour= Australia concert tour, commemorating 10&lt;sup&gt;th&lt;/sup&gt; Anniversary of the establishment of the Chor-Farmer *1&lt;sup&gt;st&lt;/sup&gt; visit to Cowra Each tour itinerary thereafter includes Cowra</td>
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<tr>
<td>1979</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; Australia concert tour</td>
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<tr>
<td>1981</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt; overseas concert tour=Australia-New Zealand concert tour *New Zealand was included in the itinerary for the first time</td>
</tr>
<tr>
<td>1984</td>
<td>4&lt;sup&gt;th&lt;/sup&gt; Australia-New Zealand concert tour</td>
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<tr>
<td>1985</td>
<td>Mayor Oliver, of Cowra, Australia, visited Japan</td>
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<tr>
<td>1986</td>
<td>5&lt;sup&gt;th&lt;/sup&gt; Australia-New Zealand concert tour</td>
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<tr>
<td>1988</td>
<td>Christchurch (NZ) Youth Brass Band visited Japan 6&lt;sup&gt;th&lt;/sup&gt; Australia-New Zealand concert tour</td>
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<tr>
<td>1990</td>
<td>7&lt;sup&gt;th&lt;/sup&gt; Australia-New Zealand concert tour</td>
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<td>1992</td>
<td>8&lt;sup&gt;th&lt;/sup&gt; Australia-New Zealand concert tour</td>
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<td>1994</td>
<td>9&lt;sup&gt;th&lt;/sup&gt; Australia-New Zealand concert tour</td>
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<td>1996</td>
<td>10&lt;sup&gt;th&lt;/sup&gt; Australia-New Zealand concert tour</td>
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<td>1998</td>
<td>11&lt;sup&gt;th&lt;/sup&gt; Australia-New Zealand concert tour</td>
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<tr>
<td>2000</td>
<td>12&lt;sup&gt;th&lt;/sup&gt; Australia-New Zealand concert tour *1&lt;sup&gt;st&lt;/sup&gt; visit to Featherston. Each tour itinerary thereafter includes Featherston</td>
</tr>
<tr>
<td>2002</td>
<td>13&lt;sup&gt;th&lt;/sup&gt; Australia-New Zealand concert tour</td>
</tr>
<tr>
<td>2004</td>
<td>14&lt;sup&gt;th&lt;/sup&gt; Australia-New Zealand concert tour</td>
</tr>
<tr>
<td>Year</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>2006</td>
<td>15th Australia-New Zealand concert tour</td>
</tr>
<tr>
<td>2008</td>
<td>Mayor Adrienne Staples, of Wairarapa (Featherston), and Mr. Don Staples, Vice-president of Featherston ANZAC Club, visited Japan on occasion of the Chor-Farmer's 40th Anniversary celebration 16th Australia-New Zealand goodwill concert tour, commemorating 40th Anniversary of the Chor-Farmer</td>
</tr>
<tr>
<td>2010</td>
<td>17th Australia-New Zealand goodwill concert tour</td>
</tr>
</tbody>
</table>

Source: Compiled by author from the Chor-Farmer Homepage
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Text revised for this edition by Kay Wall), Castle Publishing, Auckland.


If, as Donald Worster has suggested, ‘environmental history begins in the belly’, Joachim Radkau is among the discipline’s chefs-du-jour. Unlike North American food journalist Michael Pollan, Radkau displays no symptoms of ‘the omnivore’s dilemma’. In *Nature and Power*, the much-anticipated translation of his *Natur und Macht: Eine Weltgeschichte der Umwelt* (2002), the University of Bielefeld History Professor invites his readers to feast upon a wildly eclectic array of examples and displays his enticing preparations with bold strokes.

The *amuse-bouche* arrives in the form of such memorable phrases as, ‘The potato and coitus interruptus are key innovations of the eighteenth century’ (6) and ‘the goat was one of the winners of the French Revolution of 1789, at least during the Jacobin phase’ (23-24). These startling formulations are paired with more tame, but equally perceptive, reflections, such as Radkau’s observation: ‘No dike builder or tamer of waters stands at the center of Indian mythology; instead, the god Indra is celebrated as the liberator of the streams’ (171).

Radkau’s ‘appetizers’ include sophisticated meditations on ‘the inner kinship between history and ecology’, which, as he argues, ‘lies in the fact that both disciplines train their practitioners to look beyond today at complex processes that are not discernible in a snapshot’ (27). The author pairs these cogent musings with raucous, but appropriate, juxtapositions. This is a book in which Karl Polanyi, Hesiod, John Wesley Powell, and ‘a Finnish expert’ on Neolithic axes comfortably coexist in fewer than two pages (41-42).

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Radkau’s ‘main course’ displays his historical breadth and geographic range. Beginning by delving into the history of prehistoric hunter-gatherer societies and early agricultural peoples, Radkau next moves to a treatment of classical, hydraulically ordered societies, such as those of Mesopotamia, Egypt, and China. He then turns his attention to ‘Colonialism as a Watershed in Environmental History’, and finally works his way towards treatments of the Industrial Revolution and the ensuing, expansive phase of globalization. Radkau’s theoretical schema leans heavily upon Max Weber’s fin-de-siècle treatise, *The Protestant Ethic and the Spirit of Capitalism* (1905). Just as Weber provocatively theorized that a combination of ‘strict religiosity’ and emerging capitalist impulses had amalgamated to secularize Euro-American society, Radkau argues that a spiritual selflessness might be merged with economically selfish impulses to yield a breakthrough in ecological consciousness. It is through ‘the synergy of these heterogeneous motivations’ that Radkau believes we might achieve ‘a new kind of environmental politics’, which could viably address contemporary ecological crises (329-330).

Despite his globetrotting tendencies, Radkau seems most at home in the German forest. It is in this ecological niche that he pursues his central claim for ‘writing environmental history from the criterion of sustainability’ (xvi). Drawing on his earlier investigations of the eighteenth-century wood crisis in central Europe, Radkau devotes significant portions of his text to German forestry as both a model and a cautionary tale for developing successful modes of resource management.³

Radkau is nearly as comfortable in the realm of historiography. Extended discussions of Alfred Crosby’s *Ecological Imperialism* and Richard Grove’s *Green Imperialism*, detailed engagement with the work of *longue durée* scholars like Jared Diamond and Fernand Braudel, and meticulous reviews of the theories of Justus von Liebig and Karl Wittfogel will be of immense help to students seeking an overview of key thinkers relevant to global environmental history. In addition, seventy-seven pages of discursive endnotes serve as their own, wide-ranging

bibliographic essay on the state of the field, especially its German variant.

Despite these extensive and intensive features, *Nature and Power* falls short of its grand ambitions on several counts. If—to borrow an apt phrase from Raymond Williams—a ‘keyword’ is missing here, it is surely justice. One of the book’s fundamental contradictions stems from the fact that Radkau so deftly cautions his readers against simple-minded dichotomies (307), yet he uncritically replicates some of the most paralyzing binaries at the heart of neoclassical economics. As the book’s chapters unfold, we find that Radkau has led us into a political cul-de-sac where the only option is an awkward balancing act between the regulatory impulses of the bureaucratic state and the deregulatory tendencies of the unfettered market. This reader wonders where in Radkau’s Manichean worldview one would situate an avowedly anti-statist and anti-corporate eco-social movement, such as the one that emerged during the Bolivian ‘Water War’ of 2000. In this widely publicized environmental insurrection, residents of the city of Cochabamba successfully reclaimed control of their municipal water supply from the grasp of an entrenched ruling elite and the ambit of transnational capital by employing democratic strategies and innovative, non-hierarchical tactics. Radkau’s field of vision allows no contemplation of such grassroots approaches to social and environmental justice.

A related critique of the book’s blind spots also seems in order. In Radkau’s 407 pages, women are in short supply. With the exception of a few paragraphs on Rachel Carson and a nod to the tree-hugging Chipko Movement of northern India, readers find only fleeting glimpses of the female half of humanity. We are left to wonder how women such as Lois Gibbs, who led the precedent-setting battle to expose Hooker Chemical’s toxic plume at Love Canal, New York during the 1970s; Wangari Maathai, the organizer of Kenya’s pioneering Greenbelt Movement; Dai Qing, the tireless campaigner against China’s Three Gorges Dam; or the thousands of anonymous women who coordinated the sanitation campaigns of the nineteenth century might fit into Radkau’s

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4 See, for example, Oscar Olivera, in collaboration with Tom Lewis, ¡Cochabamba!: Water War in Bolivia (Cambridge, Mass.: South End Press, 2004).
'global history of the environment'. This criticism is less a suggestion that Radkau should have crammed 'everything under the sun' into his analysis; it is more a reminder of how fifty percent of the world's population can go largely unnoticed, even in such a breathtakingly synoptic work.

Just as some of the book's approaches are outmoded, its vocabulary also tilts towards anachronism. Calling Jared Diamond and Alfred Crosby 'ethnologists' (185) conjures up images that these scholars would certainly find morally repugnant; using the sixteenth-century Spanish term 'Indios' as a catchall phrase for the varied indigenous peoples of the Americas is equally unnerving. Additionally, *Nature and Power* cries out for maps, tables, photographs, or any other visual intervention that would break up the monotony of its reams of ten-point font.

On the other hand, Radkau's world offers up a surfeit of delicious 'food for thought'. The author excels when eschewing facile analyses in favour of more nuanced understandings of the past. In keeping with his cautionary tone, Radkau opens Chapter Five with the following conviction:

> It would appear that humanity entered into a new era in the eighteenth century in the history not only of ideas but also of the environment.... One definition of what was new at that time has already established itself in environmental history: the shift from a solar to a fossil energy system as the essence of this transformation.... What stands at the beginning of industrialization is not the new energy source; the environmental historian should not reinforce the picture of energy history that led people to place false hope in nuclear energy in the 1950s. Even in England, and more so still in continental Europe, the early phases of industrialization were based largely on wood and on water, on animal and human power – indeed, they were often accompanied by efforts to harness these regenerative resources completely. (195)

By the 'dessert course' of the book's twenty-seven-page Epilogue, the most striking realization for this reader was the author's authentic concern for the continued development of a
field that, in Radkau’s view, offers so much promise as a mode of comprehending past changes and so much possibility as an agent of future political and environmental transformation. Despite its shortcomings, *Nature and Power* is a meal that few environmental historians can afford to miss.

CHRIS O’BRIEN

Don Garden’s *Droughts, Floods and Cyclones* is an arresting read. As lucid as the El Niño Southern Oscillation (ENSO) phenomenon is complex, it details the manifold manifestations of El Niño – flood, fire, drought, heatwaves, blizzards, cyclones – during three meteorologically significant periods between the mid-1860s and 1903. Focused on eastern Australia, New Zealand, Fiji and Tahiti, it encompasses a diverse array of climates, economies, societies and ecologies. Crucially, this opus demonstrates how varied the effects of global scale El Niño events have been across time and space. This history shows not just variability between regions, but also variability within regions. In addition we see that the manifestations can be vastly different in the same place from one El Niño event to the next and from one La Niña to another. Moreover, it charts the broader ecological and social consequences of ENSO and human responses to these monumental events. Capturing this chaotic complexity is a remarkable achievement. Not only does it illuminate at the level of the specific and contingent rather than the general; also, it rigorously conveys the randomness inherent in weather.

Recent historical studies of ENSO reflect its intricate, multi-dimensional nature. In *Currents of Change* (1996), Michael Glantz examines El Niño, rightly, as a global phenomenon, explaining how it came to be recognised, outlining its various phases, how it can be forecast, its place in international science and the broader social and economic implications of El Niño. Mike Davis’ *Late Victorian Holocaus ts* (2001), an inspiration for *Droughts, Floods and Cyclones*, ambitiously and persuasively argues that El Niño droughts in India, China and North Africa during the period of

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modern European imperialism laid the basis of the third world. With its global focus, S. George Philander’s *Our Affair With El Niño* (2004) is distinguished by its bringing together different ways of knowing to the ENSO phenomenon. *Droughts, Floods and Cyclones* fills a void in its concentration on the western Pacific. At a time when the effects of ENSO are routinely described on almost national and even supra-national scales, this narrative history shows just how complex and variable the effects of ENSO can be across both time and space, even within small geographic regions.

Singed by the 1982-1983 ENSO, the author speaks with the power of experience. Recounting how the searing flames accompanying the drought and heatwaves of the 1982-1983 ENSO twice threatened his life and charred his material possessions to ashes in February 1983, the “Introduction” encapsulates the dire consequences El Niño holds for both humans and the natural world. Revealing that he did not come to understand the scale and seriousness of El Niño until reading *Late Victorian Holocausts*, Don Garden also shows how recently substantial awareness about El Niño outside the worlds of Climatology and Meteorology arose. It is an old phenomenon only recently recognised and far from understood. The chapters that follow certainly enhance our understanding of El Niño in Oceania.

Chapter 1 renders the work accessible to non-specialists. Offering a lucid explanation of the physical mechanisms of ENSO, as well as a brief history of its discovery, this chapter also explains how ENSO is currently understood to interact with more recently recognised phenomena such as the Inter-Decadal Pacific Oscillation (IPO) and the Indian Ocean Diopole (IOP). The different phases of ENSO events, including El Niño and its cooling of waters over the western Pacific and simultaneous warming of the central/eastern Pacific as well as, later, its reversal (La Niña) are clearly outlined. Technical as this might sound, the account is straightforward and provides necessary context. Garden also explains the methods of identifying ENSO events prior to the development of reliable barometers. Further, he outlines the problems associated with differentiating and defining ENSO events generally, from floods, droughts, heatwaves and other

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events as well as the differences between New Zealand and Australia.

ENSO has wreaked havoc on Australia in different ways. Chapter 2 demonstrates how through a detailed case-study of four regions between 1864 and 1869. Burra, South Australia (SA), experienced serious drought from mid-1864 to April 1866 and again during most of 1868-69. Northern Victoria and the Riverina, an adjacent part of New South Wales (NSW), suffered drought from 1864 until La Niña rains broke the drought. The rainfall history of the Hunter Valley (central eastern NSW), not only departed from the pattern of the other two regions but also illustrates how the effects of both El Niño and La Niña vary from one part of a region to another. The fourth Australian region studied, the Mary River and Burnet River (southeast Queensland), experienced a shorter period of drought (from October 1867 to January 1868). Garden outlines some of the varied consequences and responses, including the adoption of Goyder’s Line of reliable rainfall in SA; concerns about water conservation and management in Victoria and NSW, along with emerging awareness that droughts were natural and cyclical; animated, though speculative, commentaries about the relationship between trees, rainfall and water supply in the Hunter Valley press, many echoing George Perkins Marsh’s recently published *Man and Nature* (1864).

Things were even more complex in New Zealand. It was not a case, indeed, that El Niño in New Zealand brought only rain and drought. As chapter 3 illustrates, El Niño in New Zealand is marked more by extreme weather events in which both rain and drought play a role. To illustrate the complexity of the event, places that commonly experience drought during El Niño events can sometimes also experience floods. For instance, the worst South Island snowfalls and west coast rains have accompanied El Niño, including during the two periods of it between 1864 and 1869. By sketching a history of what happened where and when, this work helps to identify the real influence of El Niño on New Zealand weather: it alters the wind systems, usually bringing strong, even violent, southwest and southerly winds along with cells that can swing the winds southeasterly and deluge parts of the East Coasts. Narrative history provides an explanation. As in Australia, these events caused economic hardship and trauma. The consequent anxiety about weather, climate and the “foreign”
environment among the Britons who endured them, offers a fascinating view of how newcomers to New Zealand tried to come to grips with their environment.

As Chapter 4’s title indicates, the story in the tropical Pacific is one of “Cyclones and Drought”. While there were no official meteorological records kept in Fiji and Tahiti, newspaper, government and consular reports fill us in. While there are gaps in these records too, Garden shows that different patterns coincided with the El Niño events of the mid and late 1860s in both Fiji and Tahiti. Fiji suffered drought overall and in certain regions, intense cyclones. Tahiti experienced a marked increase in cyclone frequency, as well as intensity, with more general surges in humidity and a diminishing of winds.

Notions of interconnection come to the fore in Chapter 5. Beginning with an outline of the devastating effects of El Niño droughts in India and China in 1877 and 1878, it demonstrates that what brought calamity in one place might have milder effects in Australia. In contrast to the hardships in India and China, drought affected Burra and ‘settled’ South Australia in 1876 only. Throughout Northern Victoria and the Riverina, rain and drought varied markedly across time and space. While inland parts of the Hunter Valley suffered sustained drought throughout this period, places close to the coast experienced a pattern of a few very dry months interspersed with more months of above average rainfall. While much of Queensland was desiccated by drought, this ENSO brought only brief dry spells to the Mary/Burnett region. The effects were different across these regions and quite different from the preceding study period. Significantly, disaster in the Northern Hemisphere compelled observers such as Henry Blanford in India to correspond with Australian observers such as Charles Todd to identify teleconnections between the weather in distant locations – the genesis of the conceptual framework in which the ENSO phenomenon has been identified.

New Zealand’s experience of ENSO synchronised more closely with that experienced in India and China. Chapter 6 details how the most severe weather of this ENSO event came in 1877 and 1878. Numerous, unpredictable bursts of severe wind, rain, snow, flood prompted anxiety about the weather. The general pattern of El Niño drought along the east coast of both islands was reversed with the severe rains of June 1878 in Dunedin. The most striking social consequence of such violent weather was the
destruction of the town of Port Molyneux (Otago) in 1878 through flooding. Meanwhile, Fiji experienced a marked reduction in rainfall and Tahiti suffered a rare drought, severe storms and an intense cyclone during the 1876-1878 El Niño.

Chapter 7 outlines the series of El Niños that beset Australia between 1895 and 1903, along with their scientific, political and cultural consequences. Exacerbated by economic depression, the accompanying series of droughts were the harshest Australia was to experience until almost a century later. Rainfall deficiencies were almost universal. Furnace-like winds scorched much of eastern Australia in summer; icy gales bit in winter. Stock losses were measured in the tens of millions, crops shrivelled, even Cobb and Co. horse-drawn mail and passenger services were withdrawn due to shortages of feed and water. Drought afflicted all regions studied, though the Mary/Burnett did not feel the impact until 1900 and the drought began to break in Burra much earlier than in NSW and Queensland. Within the Northern Victoria and Riverina, as well as the Hunter regions, there was marked variability in rainfall, or its lack, and in the timing of the most extreme deficiencies. Such hardship prompted a search for explanations and an ultimately unfulfilled urge to successfully predict future droughts that gave rise to theories from authorities such as H.C. Russell about 19-year weather cycles, and others who related drought to sunspot activity. Politically, the ravages of these El Niños compelled many to believe that only a Federated polity of the then-separate colonies could help protect against future droughts. Underlying the then emerging nationalist iconography was the sense that the struggle with the land could, ultimately, be won.

Across New Zealand over the same period, people suffered ‘travails of wet and dry and of winds and flood’ (310). The winter of 1895 was long and icy. At times, snow covered large parts of both islands. The incredible variability of rainfall in 1897 simply defied easy summary. The predominant preoccupation was how to conserve water and mitigate floods. The years 1897 and 1898 brought the only sustained drought in New Zealand in this work’s study periods, although by late 1898 the worst was over. The 1901/1902 El Niño brought much smaller and less extreme events. Chapter 8 encapsulates the complicated, variable effects of El Niño across New Zealand. It also highlights that in Fiji the most severe rainfall deficiencies came at the beginning and end of this
period. Severe storms and a number of cyclones also brought much hardship between 1895 and 1903. In Tahiti this El Niño was marked by erratic rainfall and one of the strongest cyclones ever to strike the region.

The work’s narrative is complemented by an assortment of illustrations. Some remarkable photos portray the drama, trauma and rare delights of the extreme weather depicted in this volume. The 16 appendices and extensive end notes strengthen this work. Numbers tell stories and the graphs and tables of, mostly, recorded rainfall, are a real boon.

Don Garden concludes with a powerful message. With climate change, he notes, ‘El Niño events are becoming more frequent and severe’ (341). Such a complex phenomenon needs to be understood in all its complexity. *Droughts, Floods and Cyclones* matters because it makes a significant contribution to this end. In addition, it places major ‘natural’ events in a much broader social, ecological and climatological context and successfully demonstrates throughout how extreme weather events have limited development in various parts of Australasia and Oceania. A most engaging read, *Droughts, Floods and Cyclones* showcases the value of well documented narrative history in understanding natural phenomena.
Introduction
First-time visitors to Hamilton Gardens who arrive expecting a collection of plants in a traditional botanic garden will be in for a surprise. Rather than simply focussing on plant collections, at Hamilton Gardens the emphasis is on the gardens themselves. While botanic gardens concentrate on plant taxonomy and classification, Hamilton Gardens concentrates on the cultural meanings and contexts that gardens have historically had.

Throughout history, gardens have been a way of expressing the important philosophical ideas of their time, and in many respects the story of gardens corresponds with the story of human thought. There is more to be learnt from gardens than plant names. They can also increase our understanding of the beliefs and values of the people who made them. Hamilton Gardens tells the story of gardens by recreating some of the most historically important garden styles from a wide variety of times and places. The aim of this short article, the first of several, is to explain a little bit about each style of garden and to place each of them in their historical context.
According to sixth century Chinese art critic Xie He, the primary aim of the artist is to capture the qi, or ‘vital spirit’, of his or her object. When painting a mountain, for example, the artist should aim to capture the essence of mountain, rather than simply aim for a representation of this particular mountain. There is a similar principle at work within the Chinese garden tradition. While it is true to say the Chinese Scholar’s Garden is a representation of nature, it is also important to recognise the garden is a representation of Nature as a whole, and not of a little piece of nature. The aim of the garden is to capture and express the inner essence of Nature itself. In some ways, when we walk through the Chinese Scholar’s Garden we are walking through a painting of a fantastical landscape; a painting in which the underlying reality of Nature is exposed and presented to us.

![Pavilion](image)

One of the most important features of Nature is that it sometimes conceals itself and sometimes reveals itself. The garden imitates nature’s play of concealment and discovery by leading the visitor on a winding path with unexpected twists and turns. The Taihu Rock from China can be seen in the Court of the Frozen Clouds, but like a distant mountain peak, it cannot be approached. In the cave across the pond from the Wisteria Bridge,
the philosopher Xuan Zang sits in quiet contemplation – is Xuan Zang being revealed to the visitor, or is the visitor being revealed to Xuan Zang?

According to Chinese thought, Nature always encompasses pairs of complimentary opposites, and the gardeners of China made use of this concept in their designs. In the Chinese Scholar's Garden we can see movement and stillness, light and shade, high towers and underground caves, water and rock, brightly painted buildings and rough stone. Using these pairs of opposites in gardens was thought to help in capturing the essence of the eternal 'Yin and Yang' present in all Nature.

This excerpt is taken from *The Story of Gardens* by Peter Sergel and Geoff Doube.