Clement Hodgkinson: Naturalist and Landscape Gardener

Talk given to the Collingwood Historical Society by Georgina Whitehead on 25 August 2009

Clement Hodgkinson lived to be 75 years of age. He was born in Southhampton, England in 1818 and he died in Melbourne in 1893. Hodgkinson was in some respects representative of his age. The 19th century was a time of great scientific interest and discovery. Joseph Banks, Alexander von Humboldt, Charles Darwin, Thomas Huxley, Charles Lyall, our own Ferdinand von Mueller and other titans of science were among the army of botanists, zoologists, biologists, geologists, paleontologists etc. exploring, collecting, describing and analysing the natural world in order to make discoveries that would benefit mankind.

Scientific societies catering to a well-educated elite sprang up in many cities. During the 1850s in Melbourne Hodgkinson as a member of the Royal Society of Victoria delivered a number of papers on geology, hydrology and railway earthworks. He was elected a vice-president in 1856, along with Redmond Barry, and again in 1858, this time with Ferdinand von Mueller, the Government Botanist and director of the Botanic Garden. His most notable contribution as a member of the society was to argue, along with the Secretary for Mines Robert Brough Smyth, the need to use Australian rather than European calculations of evaporation and precipitation in determining the site of Melbourne's first reservoir for domestic water supply. Their success in promoting the importance of local environmental knowledge led in 1859 to the government choosing Yan Yean on the Plenty River.

Hodgkinson had his fair share of personal tragedy. He married three times – his first two wives died – and two of his ten children died in infancy. Little detail is known of his early life. His father, whose will described him as a 'gentleman', died when Hodgkinson was a small boy. His mother married again, this time to a man named John Millais, whose family had lived on Jersey in the Channel Islands for many generations. She had three more children, the youngest of Clement Hodgkinson's half-siblings being the renowned Pre-Raphaelite painter John Everett Millais, eleven years his junior. Hodgkinson probably learnt to speak French fluently as a child living in Jersey, which would help explain why he went on to study civil engineering in France. Upon qualifying, he worked as a surveyor in England until, at the age of 21, he came into an inheritance from his late father and set off for Australia with the intention of becoming a pastoralist. Arriving in Sydney in 1839, he purchased a partnership in a cattle station near Kempsey in coastal northern NSW. It lay on the rich alluvial plains of the MacLeay River, and was named Yarra-Bandini after the local Aboriginal people. Along with grazing he experimented in growing various crops, but his share in the station was not enough to support him.

To make ends meet, Hodgkinson took up contract surveying under the direction of Sir Thomas Mitchell and Samuel Perry in Sydney. For two years he carried out survey work far removed from his English experience. It involved exploring wild and rugged country for many weeks at a time. His surveying parties were 'well armed with carbines, pistols, and swords', although Hodgkinson was on good terms with the Aborigines generally. He thought their intelligence had been under-rated, concluding that 'in everything requiring the exercise of mechanical ingenuity or dexterity, the Australian Aborigines are most apt scholars'. He also believed that 'all endeavours to make them adopt more settled habits will be useless, for what great inducement does the monotonous and toilsome existence of the labouring classes in civilized communities offer, to make the savage abandon his independent and careless life, diversified by the exciting occupations of hunting, fighting, and dancing.' I think this comment reveals his own enjoyment as a young man of the adventures of frontier living.

This period of his life turned the gentleman's son into a hardened bushman who could negotiate swamps and dense rainforest, strip bark to make a shelter from the rain, dine off possum, dew-lizard and parrot, and survive the bite of a venomous snake. Most importantly, he developed his interest in the natural world. Few people were in such a fortunate position to study first hand a primeval wilderness teeming with wildlife, able to observe plants and animals only recently discovered or still unknown to science, and he took full opportunity of the situation. However, it was also a sad time as his wife Matilda, whom he seems to have married in Australia, died in 1843. This, and the 1840s economic depression, saw his return to England. In the manner of natural historians such as Charles Darwin, who'd published an account of his experiences and observations on his journey aboard the *Beagle*, Hodgkinson likewise decided to turn his field notes and journal, perhaps written with an eye to future publication, into a book. It was called *Australia, from Port Macquarie* to Moreton Bay; with Descriptions of the Natives, their Manners and Customs; the Geology, Natural Productions, Fertility, and Resources of that Region; First Explored and Surveyed By order of the Colonial Government, and it was published in London in 1845. The book illustrates his curiosity in the natural world and his capacity to evaluate the forces acting upon it, both environmental and human.

The book is divided into four sections. In the fourth he discusses the customs, habits, and organisation of the different Aboriginal tribes in the region of his station. He also includes observations on bush life in general, and the Australian wildlife, mainly as to what made good shooting and eating. The third section comprises an enquiry into the causes of the New South Wales depression, and he examines whether future investment in sheep, cattle, and certain types of agriculture for an export market would be profitable. But the first two sections form the major part of the book, in which he describes the MacLeay River and the country between it and the Clarence River to the north in the first part; and in the second the Hastings River and Port Macquarie district to the south, the area of the Clarence, Richmond, and Tweed Rivers, and the country in the vicinity of Moreton Bay and the Brisbane River.

He addresses the region's geology and soils, its plants, topography and climate, and puts forward observations of cause and effect. Hodgkinson's description of the country near his station shows his interest in the plant world and aesthetic appreciation of his surroundings, as well as a sense of being lord of his domain: Mount Yarra-Hapinni is densely wooded to the summit, with an almost impenetrable forest of gigantic trees, but its spurs towards the sea descend in beautiful verdant park-like declivities to the beach, the grass growing luxuriantly, even within reach of the salt spray of the ocean. At the south extremity of Trial bay, the granite again rises in a lofty conical grassy forest hill, to which I gave the native name of Arakoon; its gullies are enveloped in brushes of bangalo palms, cabbage palms, and gigantic ferns. In ascending the MacLeay river, from its entrance, the first objects which meet the eye on both banks are extensive mangrove flats, with thickets of myrtle, palm, and swamp oak, which, a few miles further on, are superseded by dense alluvial brushes, rising like gigantic green walls on both sides of the river.

He goes on to describe the 'brush' (or rainforest) made up of 'trees of almost endless variety, and very large dimensions, totally differing in appearance from the ordinary Eucalypti . . . [there are] Red Cedar, White Cedar, Mahogany, Tulipwood, Rosewood, Ironwood, Lightwood, Sassafras, Corkwood, the Australian Tamarind, Box, the numerous and elegant varieties of trees of the Myrtle genus, the Australian Palms, and the Brush Fig-tree'.

As he recounts his experiences Hodgkinson maintains a running commentary on the landscape through which he is travelling, describing the vegetation, how its character changes with the topography, and what sort of situation particular plants seem to enjoy. Trees occupy most of his attention. By the time he left the colony he'd acquired a reasonable knowledge of the various species found between Port Macquarie and Moreton Bay, and had discovered valuable cedar and rosewood stands, many of the trees with trunks six feet in diameter and 90 feet tall before throwing out a single branch.

Rocks also fascinated him. Using Humboldt's observation that excellent wine was produced from grapes growing on black clay-slate on the slopes of the Rhine Valley, he concluded that the clay-slate ranges in the vicinity of Dongai Creek 'would be preeminently suitable for the growth of the vine'. He was particularly interested in grape cultivation, writing presciently: 'All persons of intelligence in New South Wales, who have acquired some knowledge of the resources of that colony, entertain the same opinion of its peculiar adaptation to become a great wine country'. Sixteen pages of his book are devoted to wine production as an export. Although in later life Hodgkinson was known as a Presbyterian and non-drinker, in NSW he wrote that he 'drank some very good wine, the produce of the vineyards of the Messrs. Macarthur, &c'.

Hodgkinson valued the natural environment's beauty highly, and he includes many descriptions of 'towering precipices' and 'tremendous cataracts' that 'cannot fail to strike the spectator with admiration'. It's interesting to catch a glimpse of his later interest in park design when he comments disparagingly:

There is a signal want in Australia, even among the higher classes, of that just appreciation of the beauties of nature, and that innate taste in taking advantage of them, to enhance the picturesque effect of their neatly-arranged dwelling-houses, which, according to Washington Irving, characterize the English nation, from the peer to the peasant. There are some places in New South Wales, few and far between, where considerable taste has been displayed in the arrangement of the grounds, but in general the ne plus ultra of colonial landscape gardening is a square patch of land, laid out in straight walks, and surrounded by hideous pailings, whilst no flowers, or even culinary vegetables, enliven the dwellings of the labouring classes, unless some stray melon or pumpkin sends its long shoots round their huts.

During the return voyage to England Hodgkinson began work on his book, which was the first environmental appraisal of this then remote region in its early years of European settlement. It demonstrates that by the age of 26 he was knowledgeable about the relationships between geology, topography, hydrology, soils, climate, and plants, and had an appreciation for the natural world.

According to the book's preface he planned to return to Australia almost immediately. However, this was not to be. Between 1844 and 1846 he worked as a railway engineer in England, France, Belgium and Holland. Then he taught in London for 5 years at the Putney College of Geodetic Engineering. But in 1851 he once again departed for Australia with his second wife Amelia and their three children. This time he disembarked in Melbourne. Although he'd intended to take up life as a 'squatter' once more, his arrival coincided with the start of the Victorian gold rush and a colony in turmoil. That and his wife's ill health led him to accept a job as temporary draftsman in the Survey Office under the Surveyor General, Robert Hoddle. Of particular relevance, given Hodgkinson's subsequent role in developing Melbourne's parkland and Victoria's forest reserves, is that among the skills enumerated in his application to Hoddle he described himself as 'a naturalist with a particular interest in trees'.

In just under 10 years he rose through the ranks of the Department of Crown Lands and Survey to become head of its administrative arm. He went from draftsman to surveyor, district surveyor, then Acting Surveyor General, Deputy Surveyor General and member of the first Victorian Board of Science, culminating in his 1861 appointment to the newly constituted position of Assistant Commissioner of Crown Lands. The separation of technical and administrative responsibilities, as occurred with the creation of Hodgkinson's role as Assistant Commissioner, passed real power from the Surveyor General to Hodgkinson.

Although responsible for all aspects of Crown land administration, he was particularly involved in the colony's forests and the day-to-day management of Melbourne's parks and gardens. Forest management was of major importance to the colony's welfare, but the development of public recreation grounds was of far less significance and didn't warrant the personal supervision of the departmental head. However, the extraordinary attention he devoted to this pursuit shows he took great interest and enjoyment in landscape design, and his undoubted success in the field was acknowledged by his bureaucratic peers and the public alike, one contemporary newspaper referring to him as 'that most tasteful of amateur gardeners'. In 1873 he was appointed Inspector-General of Gardens, Parks, and Reserves in recognition of this work. And Ferdinand von Mueller honoured him by naming a small ornamental tree *Hodgkinsonia ovatiflora*. This plant is indigenous to the region of northern NSW/southern Queensland that Hodgkinson explored in the 1840s.

During his first 10 years in Melbourne he indulged his scientific interests, but when appointed assistant commissioner he abandoned all outside activities to devote his time entirely to departmental work. His final act as a member of the Royal Society of Victoria was to join the Exploration Committee formed in 1860 to organise the disastrous Burke and Wills Expedition. His time spent exploring northern NSW no doubt qualified him for this position. Hodgkinson's workload was very heavy, especially so because he found it difficult to delegate routine matters. In his book *The Bureaucrats' Domain* Ray Wright gives an astonishing account of how Hodgkinson controlled every aspect of the gardens he managed:

He chose the trees, shrubs and flowers, decided where they were to be planted, called tenders for fence construction, drainage work and soil cartage, selected the statues and fountains, hired the gardening staff, examined the daily work sheets of the labourers, sold dead wood and cut grass to raise revenue, bought the drays, shovels, horses and seeds, and in every way controlled the gardens' day-to-day improvement.

He carried out his garden work largely out of office hours. He lived at 157 Hotham Street, East Melbourne in a picturesque 2-storey bluestone house, which is still standing today. Every morning he walked from home through the Fitzroy Gardens, which he began in 1858, to his office in William Street opposite the Flagstaff Gardens, which he began in 1862. In the morning he'd issue orders and in the evening on the way home he would check up on progress. These two gardens were so successful that he was begged by the Government Architect, William Wardell, to lay out the Treasury Reserve next to the Fitzroy Gardens and the Treasury Building, which he finally agreed to do in 1867.

The gardens that Hodgkinson designed in the 19th century looked very different from the sweeping lawns, flower beds, and specimen trees we see today. They were planted mainly with trees and shrubs, had very few flowers because, as he explained, they required too much labour and water, and there was very little grass. The dense plantations of trees, many of which were evergreen conifers, were designed to reduce dust from the surrounding unmade roads entering the gardens, and to provide shade. The paths that cut through what rapidly became small forests were fenced to try and keep people from disappearing out of sight, where they might get up to no good, or perhaps injure themselves in the rough terrain. And at a time when walking was the most common means of getting around, the paths not only provided for a leisurely stroll within the gardens, they connected directly into the surrounding streets ensuring there was a direct route across the gardens for those whose destination was further afield.

Hodgkinson lined the paths of the Fitzroy and Flagstaff Gardens with copies of ancient and modern statues. Most he ordered to be cast in cement from the collection held in the Melbourne Public Library, and painted white. This was instructive as well as decorative, and proclaimed Melbourne to be part of a civilised and cultured world. More money and effort was spent on embellishing the Fitzroy Gardens, which formed a prestigious background to Victoria's seat of power. Many years later they were likened to the city's dining room while the Flagstaff Gardens adjacent to working class West Melbourne were compared to the kitchen.

By 1860 the environmental devastation that had occurred in Victoria after less than 30 years of European settlement was causing enormous concern, with calls for government action. Anxiety about the environment was not confined to the Australian colonies. In his book *Man and Nature: Or, Physical Geography as Modified by Human Action*, which was published in 1864, the American polymath George Perkins Marsh argued that people had profoundly affected the earth's environment, and he called for mankind to remedy the damage before it was too late. Richard Lowenthal places *Man and Nature* next to Darwin's *On the Origin of Species* (which was published in 1859) as 'the most influential text of its time to link culture with nature, science with society, landscape with history'.

It was the first book to spell out the need for reform, and nominated Australia as the country that could provide answers to questions of how much pioneer settlement had modified the environment. An international success, with Marsh's ideas rapidly accepted in Europe, *Man and Nature* arrived in Melbourne to great acclaim.

Marsh's longest chapter was 'The Woods' where he described the benefits provided by forests and pointed out the perils of indiscriminate tree felling such as erosion and loss of moisture retention. Hodgkinson must have found this of great interest as one of the most pressing environmental concerns during his time with the Lands Department, and one he was vitally interested in, was destruction of the colony's trees. Gold mining had greatly accelerated the loss begun by the settlers and other industries, and depredations had become so widespread that even Melbourne's parks and gardens were being plundered for firewood.

Hodgkinson was engaged in a constant battle trying to ensure the colony had enough timber for its future needs. Although he was not alone in this, he was the principal architect of plans to manage the indigenous forests, and is acknowledged as the "father" of Victorian state forestry'. In late 1865, the same year that Marsh's *Man and Nature* reached Melbourne, the first official statement on timber policy was jointly produced by Hodgkinson, Charles Ligar the Surveyor-General, and Brough Smyth the Secretary for Mines, in a report to parliament entitled 'The Advisableness of Establishing State Forests'.

The catalyst for the report was the destruction of timber in the goldfields. The authors observed that more was destroyed than used, and the resulting waste left on the forest floor contributed to bushfires causing even further destruction. To support their case for the need 'to enforce a more economical use of native timber, and to conserve the forests', the report drew on international experience:

In Spain, Italy, France, Poland, Switzerland, Syria, and Palestine, and also in the islands of Trinidad, Martinique, and San Domingo, much injury has been done by unwise interference with the natural forests . . . Numerous instances could be adduced of the improvements which have been effected by planting woods. In Algeria, in Southern France,—where, guided by past experience, the Government is planting largely,—in Italy, and in Lower Egypt, many districts have been made fruitful which, since the destruction of the old forests, had been barren.

This passage was taken directly from *Man and Nature* with almost no attempt to alter Marsh's wording.

An important point to make here is that although the protection and conservation of the natural world was considered important during the 19th century, it wasn't always thought of in quite the same way as today. Perhaps the most striking difference was that direct benefits to people and society were seen as central to any evaluation of the

environment. A distinctive aspect was the 'improvement' of nature, which was achieved through introducing plants and animals into places where they didn't naturally occur to supplement the indigenous flora and fauna. It was hoped that the economy would profit through the development of local industries centred on successful introductions, and recreational and other benefits were also envisaged.

It was also believed that tree cover increased rainfall. Thus Hodgkinson and others concerned with forest conservation were not only interested in replacing trees that had been destroyed, but they also wanted to plant trees in naturally treeless areas.

'The Advisableness of Establishing State Forests' recommended proclaiming large forest reserves near Ballarat and other gold mining centres, but the rest of the proposals were more concerned with the planting of new trees, such as the suggestion to establish 'a large wood of indigenous and imported trees on the present treeless basaltic plains' near Rokewood. And not only were the indigenous forests to be conserved, but with their proper management all the '*overgrown* trees' would be removed and 'other valuable trees planted in the vacant spaces'. The report gave examples of what these should be:

In the rich soil and moist climate of the elevated wooded tracts of country proposed to be reserved for state forests at Bullarook, Macedon, Mount Disappointment, &c., the most useful deciduous trees, such as English oak, Turkey oak, elm, ash, walnut, hickory, locust, maple, ches[t]nut, alder, &c., would thrive well; and also all the best timber-producing kinds of coniferous trees, including the Himalayan cedar (Cedrus Deodara), the Lebanon cedar (Cedrus Libani), the Cedrus Atlantica, and all the best pines of Europe and America.

Species selected for lower elevations included 'the beautiful and rapidly-growing pines and cypresses of California and Oregon', which had only recently been discovered and introduced to cultivation. Among those especially noted were the radiata pine, the Wellingtonia and Monterey Cypress. Although it's not possible to distinguish with certainty each author's particular contribution, it's probable that at least those parts of the report referring to plant species were Hodgkinson's, given his longstanding interest in trees. And it's striking to note that Hodgkinson had already achieved local success in growing many of the trees recommended in the report in the Melbourne gardens.

The only Melbourne reserve in which there was an unambiguous desire to preserve the native trees was Studley Park, although initially, belts of pines, cypresses and other conifers were planted there. It was the only park to have retained a significant proportion of its natural vegetation, and in 1866 Hodgkinson recommended that in future no live indigenous trees be removed to make room for exotic species. And in 1873 he reported to parliament in his guise of Inspector-General of Gardens, Parks, and Reserves that as regards Studley Park 'no further extension has been made in the planting out therein of non-indigenous trees, as it has been deemed desirable that one of the metropolitan parks should continue to afford a fair representation of ordinary Australian forest land.'

Just what prompted this attempt to preserve Studley Park's bushland? The belief that there would soon be little evidence of the pre-European landscape within the metropolitan area seems implicit in Hodgkinson's statement, and Marsh's book *Man and Nature* may well have played an important part. It arrived in Melbourne only the year before Hodgkinson recommended that the park's indigenous trees be retained. As far as American soil went, Marsh believed that for both 'poetical' and 'economical' reasons it was

desirable that some large and easily accessible region . . . should remain, as far as possible, in its primitive condition, at once a museum for the instruction of the student, a garden for the recreation of the lover of nature, and an asylum where indigenous tree, and humble plant that loves the shade, and fish and fowl and four-footed beast, may dwell and perpetuate their kind, in the enjoyment of such imperfect protection as the laws of a people jealous of restraint can afford them.

Studley Park fitted the criteria of being large and easily accessible to city dwellers. It was a popular resort for picnics and natural history enthusiasts, and in the 1880s it became a hunting ground for the Field Naturalists' Club of Victoria. This intention to preserve 'near Melbourne the primitive character of the Australian bush' was one of the first explicit expressions by the Victorian government of the desire to preserve

indigenous vegetation on Crown land beyond the need to conserve timber for future use.

At the age of 55, Hodgkinson's career came to an abrupt end. A clerk in his department, one Hugh O'Ferrall, embezzled what was then the colossal sum of £16,000, and Hodgkinson was obliged to resign. In retirement he didn't entirely fade from view, sitting on a number of government boards and commissions, including the Melbourne Harbour Trust for which he conducted experiments with Australian timbers to determine their suitability for use in piers and docks. And his reputation as a landscape gardener persisted.

In 1878 he advised the Ballarat council on what street trees to plant, and in 1880 the Brighton council requested his help in improving the Beach and Elsternwick foreshore reserves. He advised planting a mixture of exotic and Australian species, some of which were still growing naturally around Port Phillip Bay, and he suggested 'sending a trustworthy man with a spring waggon to some part of the coast near Frankston where seedlings of these indigenous trees are procurable'. Hodgkinson had a final opportunity to influence the development of the city parkland when in 1882 he was appointed to the newly formed Metropolitan Parks and Gardens Committee of Management as a public representative. He served on this committee for about 2 years.

But by the time he died nearly 10 years later this once powerful and well-known public figure had almost been forgotten. It's only in the past 25 years or so that the important part he played in Victoria's and Melbourne's development has once again been recognised.

R. Wright, *The Bureaucrat's Domain: Space and the Public Interest in Victoria 1836–84*, Oxford University Press, 1989.

Australia from Port Macquarie to Moreton Bay by Clement Hodgkinson has been digitised by Google – the link is http://books.google.com/