Leonard Cockayne – a singular man

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In other presentations at this seminar we have been informed and enlightened regarding Cockayne's magnificent achievements and contribution to New Zealand botany and ecology. But what of him, Leonard Cockayne the person, and the influences on his life?

Leonard Cockayne was born in 1855 in Derbyshire, the youngest by 25 years of five brothers and two sisters. He grew up in Norton Lees, near Sheffield, in a semi-rural environment (Figure 1). A solitary child, Leonard explored and loved the woodlands, meadows and hedgerows, liked to press flowers, and shared his siblings' love of gardening (Figure 2, page 59).



Figure 1. The Cockayne family home, Thorpe House, Norton Lees, Derbyshire, England. Image believed to have been collected in England by Eric Godley from Helen Blaby, author (1974) of *The life of the parish of St. Paul's Norton Lees, 1874-1974.* Sheffield: W. Bishop & Sons Ltd.

His natural history interests were encouraged by his family, and it was apparently a well-read household, with plenty of books. For schooling, he went to Wesley College in Sheffield, and hated it. This is understandable as the Victorian education system was hardly child-centred, and an independent young thinker like Leonard would, I imagine, feel constrained and oppressed. He tried various ploys to get out of "enforced theology" classes and remained a nonbeliever. Later in life he met the German AK Meebald who introduced him to the teaching of Steiner. However, as he later wrote to his friend Goebel "I still remain a pagan pure and simple and shall die in that faith unless madness intervenes" (Letter to Goebel, No. 35, in Thomson 1979).



Figure 2. Leonard Cockayne and his father William. Image from the Andrew D Thomson photographic collection, Christchurch Botanic Gardens, Figure 2 in Thomson (1983), from an original held by Miss Madeline M. Cockayne, Waikanae.

During 1872 – 1874 he attended Medical School at Owens College, Manchester. He might not have intended to become a doctor, but this was the only way to study the science subjects that he loved. However, he did not complete his studies, reputedly because of ill-health. Leonard may have found the course work unsatisfactory and frustrating. Botany, for example, was a theoretical course in systematics of just three weeks – no hands-on. The real strides in botany were happening on the Continent, particularly in Germany.

Given his interest in the sciences, it is unsurprising that he did not choose to go into the family drapery business along with his older brothers. In one sense, that niche was taken.

An independent young man might well have seen the colonies as providing more opportunity. And there was another good reason to look to the Antipodes. Some

sources say Leonard had an uncle in Australia or New Zealand whom he followed. The Blakeley family, related to the Cockaynes on the maternal side, had moved from Norton Lees to Harcourt, in the state of Victoria, Australia. They had a daughter Maria Maude. Maude was a handsome young woman, and it is not unreasonable to speculate that she and Leonard may have been childhood sweethearts. Leonard emigrated and taught in Tasmania and Queensland, with a six month stint as a tutor in the Blakeley household in Harcourt in 1877. The Blakeleys moved to Otago, New Zealand and Leonard followed a couple of years later. He and Maude were married in Dunedin in February 1881.

Maude was a devoted wife and great helper to Leonard. HH Allan (1935) mentions her tolerant understanding of his idiosyncrasies, and her steadying influence in times of stress. Cockayne himself refers to her affectionately as "she who must be obeyed" (Letter to AW Hill, No. 17 in Thomson 1980). Her work included pressing huge quantities of specimens that arrived from the forests and mountains week by week, and packaging countless packets of seeds destined for more than 40 botanical gardens around the world. The botanist Lucy Cranwell recalled Maude providing visitors with strong tea and fine pound cake.

Leonard taught in Taieri schools (Tokomairiro District High and Allanton) for three or so years. Teaching was not his passion, although official education records in Queensland credited him with teaching in an "intelligent and earnest manner" though "thoroughly incompetent in music" and, on one occasion, "severely censured for intemperance" (Thomson 1983). He was reputed to like his whisky, but there is certainly no indication of it affecting his abilities.

Cockayne credits his first real interest in New Zealand botany to George W Thomson's book on ferns published in 1882. This was an era of almost obsessive interest in ferns among the general public. There were other botanists in education circles in the south whom he likely met and with whom he swapped notes. George W Thomson was then science teacher at Otago Boys, Peter Goyen was an inspector of schools in Southland, and Donald Petrie, who later accompanied Cockayne on collecting trips, was Chief Inspector of Schools in Otago. Later on he befriended Robert Brown (1773-1858), a bootmaker and bryologist. It was Brown who gave Cockayne the advice to "heed not what books or authorities teach, but go to the plants themselves".

Cockayne's opportunity to indulge his horticultural and botanical passions came when his father died in 1884 and he received his inheritance, regular dividend payments from Railway and Waterworks shares. He immediately left teaching, bought land at Styx near Christchurch and became a small farmer and horticulturist. A few years later the Cockaynes shifted to 4½ acres at Brighton to establish Tarata Experimental Garden.

Without the restrictions of a regular job, Cockayne could travel and explore at will. He had a real sense of urgency to record the natural vegetation that he

could see disappearing, even then. He wanted to save it, but also to know it, and to apply that knowledge.

Importantly, he saw a priority in building up an informed public opinion. Hence he wrote popular articles for newspapers, and books such as the lovely *New Zealand plants and their story*, first published in 1910. I was interested to read a column entitled "Native Wild Flower Circle" in the Auckland Star Supplement, concerned with promoting the natural world to children (Anon. 1934). The writer mentions Cockayne's delightful books, but also says:

...even the departmental reports, despite their long and grave titles, are quite easily followed by children, partly because of the splendid photographs, but most of all because of the author's bright, simple style ... he is forever presenting word pictures, and that is why you will turn to his descriptions of plants where ordinary text book language would leave you cold.

Perhaps those who just read his writings enjoyed the gentler side of his personality. In person, Cockayne was very forthright, challenging, and dogmatic. He could appear arrogant, loved a good argument for argument's sake, and was easily roused to anger, though short-lived. He called these outbursts "mutations". In his work he hated any suspicion of a scientific lie, but in general conversation never let facts get too much in the way of a good story. He would enhance the slightest incident to a great tragedy or a greater comedy. Allan (1935) says he would grind at an encyclopaedia to secure a telling point in a dinner table conversation. But he was always ready to consider objections, to discuss freely, and to withdraw frankly from a position that proved untenable, no matter how strongly he had held it.

Arnold Wall, Professor of English at Canterbury College and a keen mountaineer who collected plants for Cockayne, said of him (Wall 1965):

He had very keen blue eyes with which he would give you a peculiar hard stare before replying to a query. He had a rather high-pitched shrill voice and habitually spoke very loudly and in a dogmatic, often pugnacious manner. It was a treat to hear him in a crowded railway carriage electrifying the other passengers by his scattering abroad the long botanical terms like some lusty Scot tossing the caber, and by his frequent burst of high cackling laughter. He was a real character and his rather dictatorial manner was only a mask for his kindly, generous and deeply emotional manner; he loved poetry and was keenly alive to the wonder and beauty of nature herself. And later: He was rather merciless in his judgments and comments on his fellow botanists, and would be contemptuous of anyone of them who did not happen to share his particular interest of the moment.

Sir Arthur Hill of Kew Gardens spoke of his experience of travelling with Cockayne in 1928, when Cockayne was 73 (Hill 1935):

No matter whether we were in a crowded train or wedged in the back seat of a motor car, he would discuss abstruse botanical matters or bring forward knotty points as to hybrids, or what was meant by such and such a species. Then his son Alfred would join in with a totally opposite point of view and a fierce altercation, proving quite harmless, would ensue – an outsider might have thought blows would follow! – and all would end happily.

Certainly some found this behaviour alarming. An informant of Arnold Wall at Kinloch told him:

Well, he was standing just here with his son; he picked up a piece of grass and said this was Danthonia pilosa; his son disagreed and thought it was Danthonia semi-annularis; Cockayne insisted in his view but his son stuck to his guns whereon Cockayne burst out: 'Shut up ye bloody fool!' Rather abrupt, what? (Wall 1965).

Perhaps his son sometimes got the raw end of his temper, but Leonard missed his company dearly when Alfred moved to Wellington in 1904. And Alfred missed his parents too and persuaded them to come to Wellington. They did for a while, found the climate "execrable, fierce winds blowing nearly all the time, and much rain" (Thomson 1983) and shifted back to Christchurch until 1914 when they moved to Wellington for good, building the cottage at Ngaio. This time they enjoyed having so much wild nature close at hand.

Cockayne was very supportive of those who worked for and alongside him and was a generous and kindly mentor. Lucy Moore and Lucy Cranwell, whom Cockayne referred to as "the two Lucies", and who both went on to have distinguished botanical careers, spoke warmly of his encouragement and advice in their early graduate days.

He did not care much for academia for its own sake, was intolerant of pretence, and a staunch advocate of the practical man. He believed that "there are few greater mistakes than for the scientific man to ignore the opinions and experience of the practical man; on the contrary the practical man should be listened to with respectful attention" (Moore 1967). Such practical men were among his recruits who collected for him, for example, Lex Mowat, a young shepherd at Molesworth, Scott Thomson a Dunedin manufacturer and George Simpson a builder (both skilled at photography and growing mountain plants), and Andrew Beddie, a stonemason who did a detailed botanical study in the Rimutaka Range. Cockayne would always give thanks where it was due, saying, for example to the Nelsonian Frank Gibbs, "Virtually all I know regarding the plants of Nelson and their distribution can be traced to your work" (Moore 1967).

I mentioned his lack of concern for academia in itself. But the acknowledgement and praise for his work of those whose opinion he valued, "those who knew", was hugely prized. He held many official positions in New Zealand scientific organizations and awards and medals, such as the Darwin Medal, of considerable esteem. But the one honour he valued as much as any was his honorary doctorate from the University of Munich conferred in 1903, which significantly improved his status in New Zealand. Its value was all the more because his close friend and mentor Karl von Goebel was instrumental in his obtaining that degree.

Cockayne wrote to him with effusive thanks, saying also: "My wife is overjoyed at being Frau Doktor. Alfred thinks he comes off the worst, but I tell him to pass a few more examinations and do a little more work" (Letter to Goebel No. 18, in Thomson 1979),

Karl von Goebel was a leading German botanist and a prime figure in the new field of ecology. Cockayne credits him with being the foremost influence in his ecological career. Goebel visited New Zealand for two weeks in 1898 (Figure 3) and he and Cockayne struck up both a professional rapport and a long lasting friendship.



Figure 3. Professor Karl von Goebel with a vegetable sheep (*Raoulia eximia*) collected for study in Munich during his visit to New Zealand in 1898. He formed a lasting friendship with Leonard Cockayne who took this photograph at Castle Hill. Image from the Andrew D Thomson photographic collection, Christchurch Botanic Gardens, originally from Moore (1967). The Royal Society of New Zealand is acknowledged.

When I first read about Goebel and his influence on Cockayne's science, I imagined an older man, a mentor in the prime of his career, influencing a young acolyte. But they were actually the same age, both 43 when they met, Goebel just a month older, which perhaps explains why they hit if off so well as friends. They kept up a long and vigorous correspondence throughout their lives, until Goebel died just two years before Cockayne. There was a ten year gap in their correspondence starting in the war period from 1914. In July of 1925 Cockayne acknowledges a letter from Goebel:

I cannot express how great my joy to have once more a letter from you. There is no man on earth whom I honour so greatly or for whom my affection is so strong. And it was most distressing to think – as I did – that I should never hear from you again; nor could I be the first to reopen our correspondence, for it was you – the Master – to do so and not for me – the pupil (Letter to Goebel No. 30, in Thomson 1979).

Cockayne was a prolific letter-writer, including some 445 correspondents outside New Zealand. He often felt isolated, with only a limited number of peers interested in the same studies or at hand to debate science issues. The latest science literature was difficult to obtain in New Zealand. He wrote to William Hemsley at Kew: "Even Cheeseman and Petrie are so wrapped up in deciding whether a certain plant be a species or no, that my perhaps wider pursuits are of little interest to them; and then too we live many hundreds of miles apart" (Letter No. 5, in Thomson 1980).

I mentioned his ill health and lack of robustness, which pop up in various writings about Cockayne. A serious period was in 1904 when he was diagnosed with neurasthenia, not a term used today, but seeming to correlate somewhat with chronic fatigue syndrome. Certainly, he was far from well and could not walk much distance at all (though he could ride a bike). He was ordered to live in the open air, to sleep in a tent, and to do no mental work of any kind. Nonetheless, he always did get by, despite bemoaning his lack of energy compared with that of his son Alfred, who was then in his early 20s compared to Cockayne in his 50s. In fact Cockayne recovered and continued his field explorations into his late 60s and 70s.

And these trips were not a doddle: there was plenty of dirt and hard-living. Cockayne records a summer field trip in 1900 to the summit of Arthurs Pass, where he stayed for six weeks. It rained half the time, and blew nor'west for the whole period with an exception of a few hours when a south-west wind brought snow. His tent, situated in a usually quite dry spot, was not infrequently filled with water to a depth of 15 cm (Moore 1967).

And at Stewart Island in 1907 he came to Christmas Village. The Department of Conservation website still reminds trampers today that there is no settlement there, just a hut, though I am sure much improved since Cockayne's time. "The Village consists of one hut, the weatherboards are gone, a third of the floor is gone, the roof leaks at every point, and the door won't shut. ... When it rained on our heads in the night we turned and took it on our feet" (*Press*, 4 July 1907, in Moore 1967).

On another occasion he was camping with Alfred. They left a stew in the billy for an evening meal and were away for the day. Bluebottles discovered the stew. He looked at it privately on his return and said to his son "I think we'll wait till it's dark before we eat this" (Wall 1965).

He would spend hours building and perfecting a bed made from mangemange or some other divaricating shrub, and disturb his mates with incessant rearrangements during the night, or send them mad searching for his magnifying glass, which he wore around his neck on a string.

Arthurs Pass was perhaps his happiest hunting ground and he campaigned hard to have the area preserved. He wrote to Goebel in 1927: "It is no longer the quiet spot you saw but excursion trains take 1000 or more people at a time – nature wreckers! – and *Ranunculus lyallii* and *Ourisia macrocarpa* and the great celmisias are torn from the ground only to die" (Letter No. 31, in Thomson 1979). He was one of the first to emphasise that New Zealand forests were not adapted to withstand the ravages of plant-eating animals, and essentially put the Forest into the New Zealand Native Bird Protection Society. He wished for the power to act on the advice of Goebel "to get the fools hanged" before they could introduce animals such as wild goats, which would cut up alpine flora and forests as they had in Greece.

I will leave the final word to the bright young people whom Leonard Cockayne fostered. In 1932, two years before he died (Figure 4), when he was blind and with his general health in decline, there was an opinion piece in the Victoria University Students Association newsletter, *SMAD* (*Sapienta Magis Auro Desideranda*):

Those of us who have been privileged to meet "the Old Doc", as he is affectionately dubbed by some who know and love him well, are struck with his vital and stimulating enthusiasm in all lines of interest. As one of his friends has been heard to say "He is one of the youngest people I have ever met". In spite of his age he emanates that fire which is usually found in the youth who is on the threshold of his career. As a conversationalist his company is delightful, as a scientist his capabilities are unsurpassed (Anonymous 1932).



Figure 4. Maude and Leonard Cockayne at Ngaio, July 1932, photographed by Lucy M Cranwell. Image from the Andrew D Thomson photographic collection, Christchurch Botanic Gardens, originally from Auckland Institute and Museum, reference 65/296.

References

- Anonymous 1932. Dr Leonard Cockayne In: SMAD An organ of student opinion 3(3).
- Anonymous 1934. Native Wild Flower Circle. *Auckland Star LXV* (105), 5 May 1934, page 2 (Supplement)
- Allan HH 1935 Leonard Cockayne (1855–1934). Proceedings of the Linnean Society of London Session 1934-35: 161–171.

- Godley EJ 1979 Leonard Cockayne and evolution. New Zealand Journal of Botany 17: 197–215.
- Hill AW 1935 Leonard Cockayne 1855–1934. Obituary Notices of the Royal Society of London 4: 443–457.
- Moore LB 1967. The Cockayne Memorial Lecture, 1965. Leonard Cockayne, Botanist. *Transactions of the Royal Society of New Zealand (General)* 2(1): 1–18.
- Thomson AD 1979. Annotated summaries of letters to colleagues by the New Zealand botanist Leonard Cockayne 1. *New Zealand Journal of Botany* 17: 389–416.
- Thomson AD 1980. Annotated summaries of letters to colleagues by the New Zealand botanist Leonard Cockayne 2. *New Zealand Journal of Botany* 18: 405–432.
- Thomson AD 1983. *The life and correspondence of Leonard Cockayne*. Christchurch: Caxton Press.
- Wall A 1965. Long and happy. Wellington: Reed.